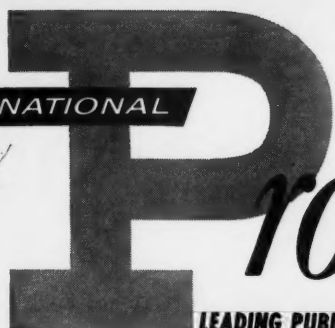


THE NATIONAL

MAY 14, 1960



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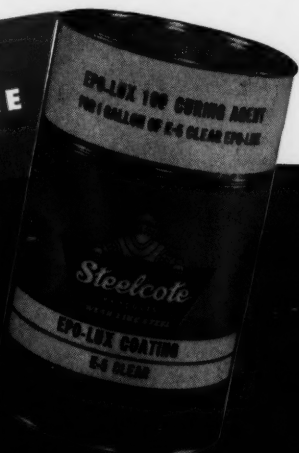
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Don't Let Sammy Run	11
Sausage Making New Style	12
Break-Through in Tendering	14
Portable CO ₂ Refrigeration	15
The Meat Trail	43

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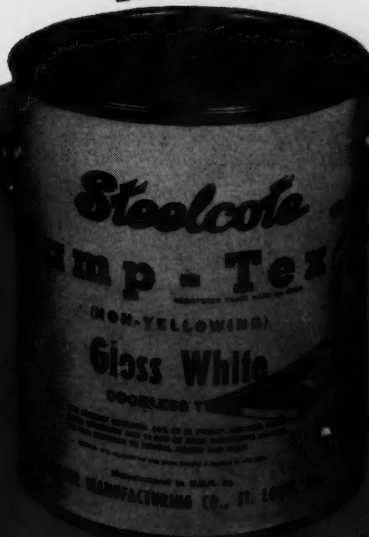
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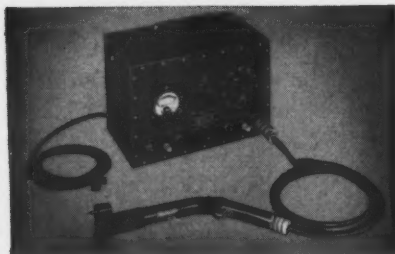
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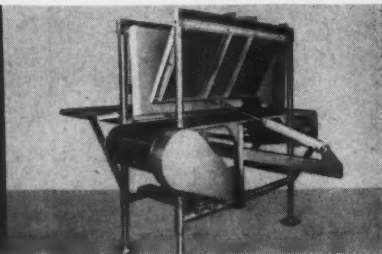
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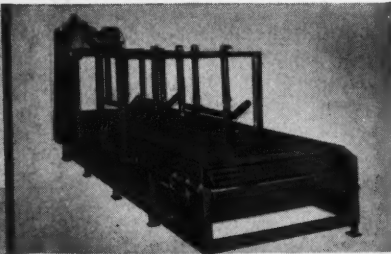
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CONTENTS

Don't Let Sammy Run 11

Use of a tighter check rein on some federal bureaus and departments by the executive and legislative branches would result in more successful and responsible government and less waste of tax funds.

News of the Industry 11

What's happening in Washington, the state capitals and North, East, West and South of importance to the meat industry.

Many a Mickle Makes Muckle 12

Chicago sausage firm adds continuous stuffing, snap chill for frankfurts, metered addition of liquid sweetener to emulsion and many other innovations to save, increase output and improve its products.

Beef Tenderization Breakthrough 14

Swift & Company injects food enzymes in cattle before processing, supplementing those present in beef to produce more tender steaks, roasts and other cuts. Swift's tendered beef will be sold under ProTen mark.

Portable CO₂ Refrigeration 15

Occasional extra capacity and economical standby service, as well as better carcass chilling and reefer truck and car pre-chilling can be obtained with a new system.

Meat Research Conference 23

Microbiology of ham curing, use of ultrasonics for evaluation of meat composition, and factors influencing cooked pork quality were among topics covered at AMIF meeting.

Market Summaries

All Meat, page 34; Processed Meats and Supplies, page 35; Fresh Meats, page 36; Provisions and Oils, page 37; By-Products, page 38, and Livestock Markets, page 40.

The Meat Trail 43

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THE NATIONAL PROVISIONER, MAY 14, 1960

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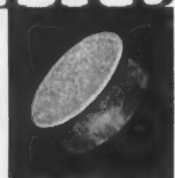
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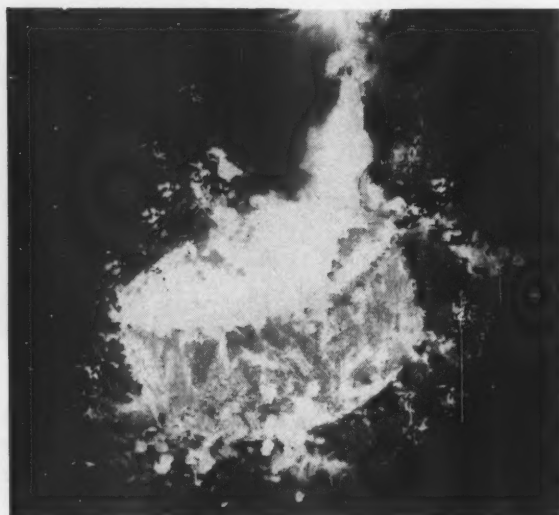
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INDEX

American Shorthorn Association45	Julian Engineering Company47
Barliant & Co. ....49	Koch Equipment Co. ....42
Basic Food Materials, Inc. ....28	Le Fiell Manufacturing Co. ....32
Calgon Company .....30	Lily-Tulip Cup Corporation .....29
Cardox Division of Chemetron Corporation .....Third cover	Meat Packers Equipment Co. ....8
Chicago Corned Beef Corporation .....45	Meyer Packing Co., The H. H. ....50
Cincinnati Butchers' Supply Company, The .....22	Miles Chemical Company .. 6
Custom Food Products, Inc. ....9	Olin Mathieson Packaging Division .....7
Dobeckmun Company, The .....17	Oppenheimer Casing Co. 24
Dupps Company, The .....Fourth cover	Packers Development Co. ..38
Fairbanks, Morse & Co. ....27	Paramount Paper Products Co. ....4
Firestone Tire & Rubber Company, The .....21	Pfizer & Co., Inc., Chas. .. 3
First Spice Mixing Company, Inc. ....45	Reich & Sons, Inc., A. ....33
Gardner-Denver Company 32	St. John & Co. ....38
Globe Company, The .....Second cover	Scotsman-Queen Products Division, King-Seeley Corporation .....25
Griffith Laboratories, Inc., The .....5	Stahl Company, Harlow C. ....45
Hess, Watkins, Farrow & Company .....50	Steelcote Manufacturing Co. ....Front cover
Hubinger Company, The ..18	Tee-Pak, Inc. ....10
Hygrade Food Products Corporation47	Werner Manufacturing Company48
	Western Buyers50

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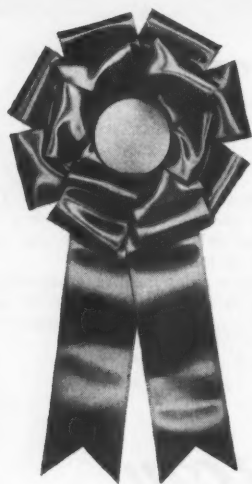
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What country is the leading hog producer? The latest year for complete world-wide figures (1956) shows the U.S. and Russia virtually tied in hog production, 51.6 million and 52.2 million respectively. But the champ was China, with a staggering total of 84 million hogs. Next: *Which state produces the most hogs?*

Who's the largest exclusive meat casing manufacturer? Tee-Pak, Inc., a multi-plant producer, is the largest corporation in the world devoted exclusively to the manufacture of meat casings. Casings are Tee-Pak's only business! Satisfying your casing requirements is Tee-Pak's only aim!



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PROVISIONER

May 14, 1960

VOLUME 142 NO. 20

Don't Let Sammy Run

We have been convinced by the "spy-in-the-sky" episode, as well as by our own recent experience in connection with the U. S. Department of Agriculture's venture into the "business" of carlot meat market reporting, that there is great need for some modern and speedy method of checking and controlling the activities of the executive divisions of our federal government.

When the work of a government agency is not checked continually by the director of the department in which it operates, and by Congress, it almost inevitably extends and expands its activities in areas where it does not belong. It slips quietly from the control of its superiors and often forms a symbiotic relationship with some outside special interest. It cannot be said of the rolling government bureau that it gathers no moss; as it rolls, it grows ever more verdant with jobs and greenbacks for spending.

We have talked with several Congressmen in recent weeks about this characteristic of our government. Perhaps in an effort to furnish a counterirritant for our own troubles, they have admitted sourly: There isn't anything we can do that is very effective. We give the departments their appropriations under rather broad directives; once they are out of the room with the money, some of them spend it pretty much as they please.

A midwestern Senator gave us this "happy" example:

"The Air Force ran pretty wild in building the new Academy. When the construction work was done, the officers turned up with glad cries of 'Surprise, Surprise.' They showed us facilities which Congress not only had not authorized, but also would have rejected had they been proposed originally. What are we going to do now? Tear down the buildings?"

Tearing down the buildings would not be helpful or return a dollar to the taxpayers. What is needed is a continuing careful and unbiased audit of government activities for information and control by the executive and legislative branches and the taxpayers as a whole.

Maybe we could prevent Sammy from running so far and so fast and in so many different directions with our money.

News and Views

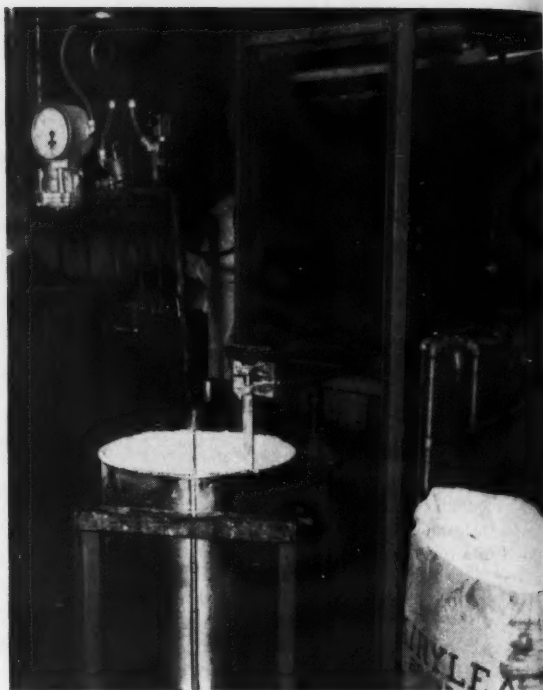
Full Amount of Budget request for federal meat inspection—namely \$21,562,000—has been recommended by the House appropriations committee. The committee report said: "The bill includes \$21,562,000 for this activity for 1961. This amount provides an increase of \$237,100 for employee health benefit costs. It permits the continuation of meat inspection activities of the Department at the 1960 level of operation." In other parts of the report the committee said: "In view of the need to develop better and safer pesticides and sprays . . . the committee has included an additional \$250,000 in the bill for 1961 which should be used to evaluate, reorganize and strengthen the programs of the department in this general area. . . . It has come to the attention of the committee that there is discrimination against U. S. pork in some foreign markets because of the use of live virus to combat hog cholera in this country. It is understood that the use of sterile virus is just as successful and will not penalize U. S. pork in foreign markets. The department is directed to investigate and report to the committee next year on steps which should be taken to meet this problem."

We Merely Import Meat in its original package," said Harry L. Gurrenty, president of Illinois Beef and Provision Co. of Pittsburgh and three affiliated firms, in replying this week to the action of the Pennsylvania Department of Agriculture in connection with kangaroo meat. "The only kangaroo meat we imported," said Gurrenty, "was a small shipment of about 30,000 lbs. brought in from Australia in 1958. Our records show that in 1959 about 6,000 lbs. of this small shipment were sent to a mink farm in Pennsylvania and the remainder was shipped to meat processors outside Pennsylvania. This kangaroo meat arrived crated in wooden boxes plainly marked 'KANGAROO WAHROO MEAT' stamped in large letters together with a picture of a kangaroo. This kangaroo meat was received by the purchasers in the same plainly-marked boxes. Before the kangaroo meat was permitted to be exported from Australia, it was inspected and passed by Australian authorities and on entry into the United States was similarly inspected and passed by the Food and Drug Administration. . . . The State Attorney General of Pennsylvania charges that this firm has mislabeled or misbranded meat and billed it at a higher price. Furthermore, she alleges that identifying 'symbols were erased and new higher designations were substituted.' Any and all marking or symbol changes made on the boxes were made in accordance with federal regulations. No meat was misbranded or mislabeled by us or caused to be mislabeled or misbranded by us. Under the general practice prevailing in the meat industry, a customer receives the meat subject to his approval and he may reject it for any reason if he sees fit."

Secretary of Agriculture Ezra Taft Benson has announced establishment of a Packers and Stockyards Division in the Agricultural Marketing Service, USDA, with Howard J. Doggett as director of the division. Both actions will be effective July 1. The Packers and Stockyards Act presently is administered, along with marketing service programs, in the Livestock Division of AMS. The marketing services will continue to be administered by the Livestock Division. The P & S Act was amended in 1958 to bring under department regulation all livestock transactions in interstate commerce. It also requires investigation and regulatory functions dealing with unfair, deceptive, discriminatory or monopolistic practices on the part of packers. Doggett, who currently is the agricultural attache in Belgium, will leave this post to assume directorship of the new Agricultural Marketing Service division.

Snap Chill for Franks, Continuous Stuffing and Metering Syrup are Used by American Provision of Chicago

WATER is metered into drum on dolly for blending with non-fat dry milk solids. The material is then added to the emulsion in liquid form, avoiding dusting of machinery.



OUR NEXT project is the installation of a conveyor system to move our packaged items from the second floor packaging department to our first floor holding and order assembly cooler. Our policy is to finish one project and be ready to start another," says Walter Lampert, president of American Provision Co., Chicago, an independent sausage kitchen.

Using a bootstrap technique the

company has improved the overall efficiency of its operation over the past two years.

In moving to its present location the firm acquired a building with ample space and basic sausage making equipment. As money has become available, the management team of Lampert, Peter P. Keller, secretary - treasurer, and A. M. Jourdan, vice president, has selected specific projects to improve

the use of available space and equipment, to raise the quality of the products and improve the appearance of the plant. After the conveyor installation is finished the walls in the manufacturing-processing rooms will be tiled to cut down the work needed to keep the premises clean. The plant operates under Chicago Board of Health inspection.

The projects completed to date include two major and two minor innovations. Installation of a snap chill chamber for frankfurts and a streamlining of emulsion manufacturing-stuffing equipment are the major innovations. A liquid syrup storage and metering device and a rapid blender for dry non-fat milk solids are the minor improvement items. All have an important bearing on the competitive position of the company, according to Jourdan.

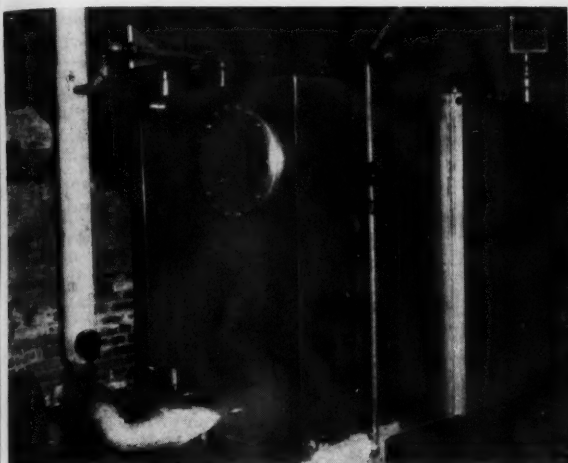
After studying the production figures, management decided that the volume of frankfurt output justified mechanization. A semi-automatic system was installed. The firm has a separate stuffing room for loaf and stick items.

In the new frankfurt operation, emulsion flows continuously from the first unit to the stuffers, and product flows thence to the smoke-stick hangoff stations. The meat is handled only in batching and charging the first unit.

After the meat is batched, it is dumped into a Boss Chop-Cut unit. While the emulsion is being pre-



STREAMLINED flow of emulsion from bowl to emulsifying machines can be noted as material is discharged into stainless steel charging bucket. The normal flow pattern in production of frankfurts is for the meat to go into the stainless steel hopper of the continuous stuffing machine shown at right.



LEFT: Large storage tank holds liquid corn syrup used in sausage manufacturing. Unit is continuously vented to prevent condensation of moisture on stored product.



RIGHT: Liquid corn syrup flows into cutter. A metering device controls the amount added to emulsion. The firm has found the use of liquid sweetener to be economical.

pared, a metered volume of liquid corn syrup is pumped into the bowl. Working with the supplier, the American Maize-Products Co., the firm installed a 20,000-lb. holding tank and the pump and metering device to feed the sweetener in measured amounts into the emulsion in the cutter.

The tank is located on the first floor. The tank is equipped with an inner "dog house" tank in which the liquid to be used during one day is heated to 98° to 100° F. A warm air circulating system keeps the stored product free of any condensation to forestall bacterial activity.

A Liquid Controls metering device is installed in the manufacturing room and is preset to feed the desired amount of corn syrup into the emulsion. The operator turns on the metering switch, which kicks in the pump and, when the desired quantity has passed through the device, it stops the pump.

The fact that the sweetener is added mechanically, and is purchased at favorable bulk price and in liquid form, gives the installation an attractive payback period, says Keller. The system also assures uniform flavor.

The firm also adds dry non-fat milk solids to its emulsion. These milk solids formerly were added in the dry form and the dusting coated equipment and caused product loss. The milk dust also complicated the work of sanitation and the maintenance of sausage manufacturing equipment, asserts Jourdan.

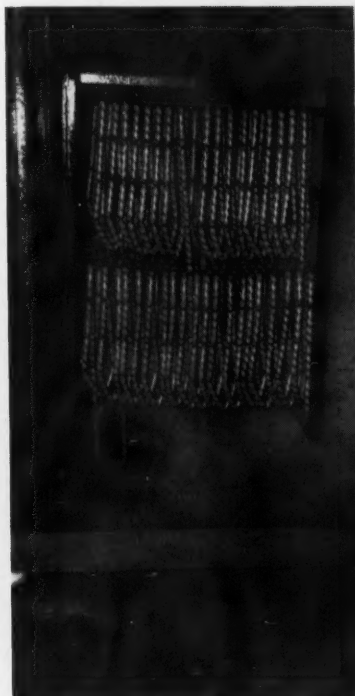
Sausage maker Eilert Fritz, a 35-year industry veteran, decided there was no reason why the milk solids had to be added in powder form.

Vic Lombardi, plant engineer, built a portable mixer for blending the milk solids with part of the water normally added to the emulsion. The portable mixer is lifted and lowered hydraulically on a channel frame. An Eagle Signal metering control is mounted on the frame. The amount of moisture to be added is preset and the operator places the milk solids in a stainless steel drum and moves it on a dolly under the blend-

er and water outlet. He throws the switch of the water metering device, lowers the blender shaft and turns on its motor. As the slurry is blended he adds the seasoning which is premeasured into stainless steel pans.

At the end of the blending cycle, the operator and an assistant move the drum to the Chop-Cut unit and pour the contents into the bowl. In

[Continued on page 31]



LEFT: Fine mist created by new spray nozzles chills product quicker with less water. **RIGHT:** Snap chill cabinet with rapid air movement cools frankfur links from a temperature of 100° to about 46° F. within 6 minutes.

SWIFT & COMPANY has achieved a scientific breakthrough in the tendering of beef in which the action of the meat's own enzymes is supplemented by an injection of natural food enzymes into the cattle's vascular system a short time prior to slaughter.

The patented process (patents have been granted in Canada and in several other countries) has been in use in Swift plants at Ocala, Fla., and St. Joseph, Mo., for a number of months and the resulting products have been test marketed with success in the plant areas, as

of unconventional conditions in the slaughtering-dressing-distribution cycle. The cattle is stunned, killed and dressed in a humane manner only two minutes after the introduction of the supplementary enzymatic material into its vascular system. It is dressed and chilled and, within 24 to 36 hours, the meat is suitable for retail cutting, packaging and sale as identified tender retail cuts.

High temperature holding, either under germicidal lamp control or antibiotic inhibition, is not necessary in this shortened tendering process. Normal chilling and holding temper-

"All beef contains enzymes which help produce tenderness when the meat is allowed to age. Swift's new process adds enough additional natural food enzymes to produce the desired tenderness when the meat is cooked."

This significant development will make beef even more popular with consumers than it is today, in Dr. Robinson's opinion. This new development means that an increased variety of beef cuts can be broiled or roasted.

"Livestock producers, the meat distribution trade and consumers will all benefit," he added. "The extensive research which Swift has carried out makes possible improved tendering of all grades and cuts of beef. In addition to superior tendering, the process avoids the shrinkage losses and discoloration associated with ageing methods."

TENDERING BREAK-THROUGH

Swift Injects Cattle With Natural Food Enzymes Prior to Processing

well as in more distant localities.

"Use of this new technique improves the natural tenderness of beef," P. E. Petty, Swift vice president declared in making the announcement. "It climaxes a long-time meat industry search for a practical method to produce steaks, roasts and other cuts of beef with increased tenderness for all grades."

Swift has adopted the trademark "ProTen" to identify its tendered beef and has associated the name with its own highest grade brands of "Premium" and "Select." These cover roughly the range of U. S. Prime to high Good, and it is in this area, according to Swift spokesmen, that the process, at present, is most valuable in its contribution to meat retailers and the eating satisfaction of consumers.

The scientific staff of Swift & Company has kept the representatives of the U. S. Department of Agriculture closely informed of its work and, under the Meat Inspection Act, has received approval of the development. The Swift scientists emphasize that the process does not involve the use of "additives," but, rather, calls for the employment of natural food enzymes which have been widely used in the food field for many years. For this unique process Swift has found its own way of refining the enzymatic material for a specific purpose.

One of the most interesting aspects of the Swift process is that it does not call for the introduction

atures are maintained during the period and the meat retains all the characteristics of fresh-cut and unaged beef—bloom, lack of drying and lack of mold—except that it contains the unexploded potential of tenderness, according to Swift.

This potential is realized, according to Swift scientists, when the damped tendering power infused in the meat is released as the housewife in cooking begins to raise its temperature above 120° F. The tendering power is released in such a manner that a dry-roasted low Choice chuck cut becomes the equivalent in tenderness, flavor and eatability of a roasted or broiled Choice to Prime loin or rib.

"Marketing tests with the tendered beef are being conducted in several areas," Petty declared. "These studies will be continued and expanded as additional facilities become available. It will be some time, however, before ProTen beef will be available nationally."

Describing the scientific breakthrough achieved by the research team under his direction, Dr. H. E. Robinson, Swift vice president in charge of research, explained that the action of enzymes in making beef tender has been known for years. "However," said he, "the industry heretofore has not been able to find a completely satisfactory way to supplement the amount naturally present in beef. Swift scientists have unlocked this secret as a result of several years of research.

Michigan Group Pleased At New Member Response

The membership drive of the Michigan Meat Packers Association is off to a very successful start, association president Charles Watson of Vogt Packing Co., Flint, announced. Membership has increased by 101 packers since the drive began in February, he said.

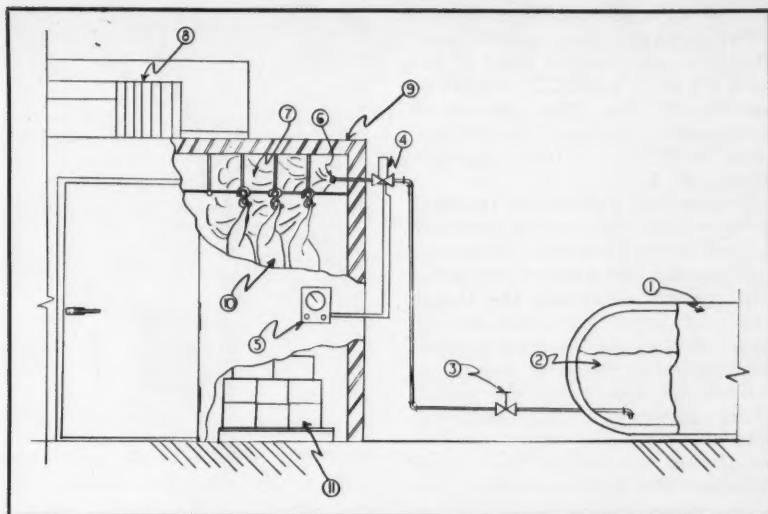
"It is our sincere hope that each packer in Michigan will join the organization for his own benefit and for the benefit of the general public," Watson added. The aim of the MMPA, he explained, is to serve as a clearing house for problems regarding the packing industry, to undertake special studies and to keep the membership aware of detrimental and beneficial legislation, which seems to be increasing considerably each year.

James Hazekamp, a former Michigan packer, is the field representative of the association and is in charge of the membership drive. He has been instructed to visit personally each packer in the state to acquaint all with the aims and goals of the MMPA. The association's office is at 510 W. Hackley ave., Muskegon, Mich.

Barley Feed for Hogs

Finely-ground barley — supplemented with meat meal, blood meal, salt, trace minerals and vitamins and then compressed into small pellets—is proving comparable to corn in fattening livestock, especially hogs, according to Dr. W. E. Dinusson, animal nutritionist at the North Dakota Agricultural College.

Portable Cooling With CO₂ Meets Overload, Acts as Standby and Chills Carcasses and Trucks Better



LIQUID CO₂ chill room cooling system: 1) Liquid CO₂ storage vessel; 2) Liquid CO₂; 3) Manual valve; 4) Control valve automatically operated by No. 5; 5) Temperature controller; 6) CO₂ spray orifice; 7) CO₂ gas; 8) Present refrigeration equipment; 9) Chill room; 10) Hanging carcasses; 11) Packaged product. Drawing by Liquid Carbonic Div., General Dynamics Corp.

THE REFRIGERATION system for a meat plant must be sized in terms of estimated kill, sausage tonnage, meat freezing and smoked meat processing requirements, etc. The refrigeration facilities are planned by the consulting architect and engineer to meet an estimated peak load.

However, peak loads sometimes exceed the capacity of permanent refrigeration equipment. This may be due to a heavy demand for frankfurts, such as for the Fourth of July and Labor Day when production may increase eight-fold, or the purchase of an extra hundred head of hogs on a favorable market.

Generally speaking, dressing and processing capacity can be expanded

more rapidly than the cooling facilities. The employees can work an extra shift. The refrigeration system, however, will require more time to pull down the temperature of extra product and this is a risky procedure with any meat and especially when it is in carcass form.

One solution to the problem of above peak loading is the use of a portable refrigeration system utilizing CO₂ as the refrigerant.

Such a system is inexpensive to install and reliable and economical to operate. Its economy lies, of

course, in its use for peak or specialized purposes; for standard loads the conventional type of refrigeration is most economical.

In the portable CO₂ refrigeration system, carbon dioxide in the low pressure liquid form is stored at the meat packer's plant in insulated vessels at 300 psi. and 0° F. Generally, where potential CO₂ consumption justifies it, the pressure vessel and storage facilities are supplied and maintained at no charge by the CO₂ manufacturer. The liquid carbon dioxide is piped from these storage vessels to the chill cooler. The packer pays for the controls in the cooler, thermostat, switch, etc., which cost about \$150, plus the piping and insulation which will vary according to the installation. Since the carbon dioxide is stored under pressure, no pump is required in transferring it from storage vessel to chill cooler.

Several orifices, of which the number and size are determined by the room characteristics, product, rail height, etc., are located in the cooler. A horn nozzle similar to that of a fire extinguisher usually is employed as it distributes effectively the CO₂ "snow." As the liquid carbon dioxide passes through the orifice, it quickly expands to form carbon dioxide vapor. In this phase change from the liquid to the vapor state, a large quantity of heat is absorbed from the chill cooler.

Each pound of liquid CO₂ injected into the chill room will provide 115 Btu. of refrigeration as it vaporizes. In addition, the -110° F. cold vapor



PERMANENT injection horn releases refrigerant at ceiling of the truck with sufficient velocity to assure its flow throughout the load. With a permanent injection system the doors normally are closed while the carbon dioxide is being released into the interior of the truck.

absorbs an additional 20 to 25 Btu. as it warms to cooler temperature. The total refrigeration effect of injecting 1 lb. of liquid CO₂ is approximately 140 Btu. This amount of refrigeration can lower the temperature of 10 lbs. of meat approximately 23° F.

Several beef packers are reported to have their chill coolers equipped to pull down the product temperature rapidly. The primary refrigeration system eliminates the initial heat and vapor and after several hours of work by the plant system, portable refrigeration is used.

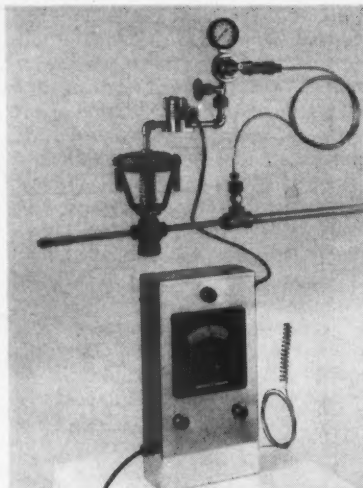
Since the CO₂ enters the cooler under pressure, it has sufficient velocity to provide turbulence and circulation throughout the entire chamber. The injection system provides immediate uniform cooling. The system is completely automatic. In some instances where it is desired to chill beef carcasses overnight for shipment on the following morning, a specific amount of CO₂, calculated for its heat transfer value, is injected to the room.

In other installations where the system is a safety valve for use when the extra 100 hogs are squeezed into a cooler, the system operates intermittently. A controller is used to sense and indicate the actual chill room temperature. If the chill cooler temperature is above the proper level, the controller automatically actuates the supply valve and admits CO₂ into the cooler. When the temperature has been reduced to the desirable level, the controller closes the supply valve. The system can be engineered so that the portable refrigerant is used when it is obvious that the plant refrigeration system will not be able to carry the extra load.

One of the additional advantages of portable refrigeration is the reduction of product shrinkage. This is due to the mechanics of chilling whereby the cold CO₂ vapor comes to and chills the product without any appreciable movement of warm air from the product.

It is claimed that in some installations the saving in product shrink justifies the use of portable refrigeration. The primary refrigeration is employed to firm and dry the product while the portable system is used for the final pull-down. The finish chilling with CO₂ improves the bloom of the carcass meat. The saturation of the atmosphere with carbon dioxide prevents oxidation and bacterial growth that reduce the bloom of the meat.

Portable refrigeration also is used by packers who wish to reduce the temperature of smoked meat rapidly



CONTROL complex is activated by temperature recorder that admits liquid CO₂ when a preset temperature is reached and cuts off when the temperature falls to desired degree. Controls are used where portable setup is used for peak loads.

so that it can be wrapped within a few hours.

Portable refrigeration also provides a secondary refrigeration system that can be pressed into service during an emergency. The system can be maintained on a standby basis at a cost much lower than conventional refrigeration facilities.

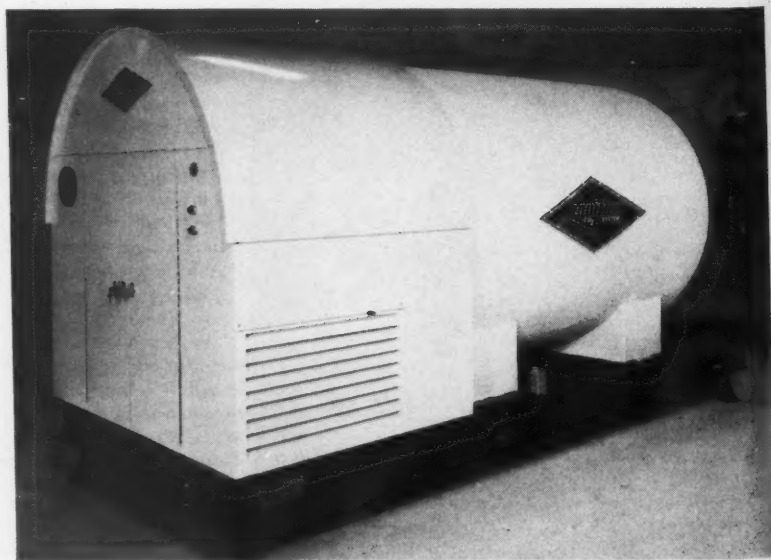
The portable refrigeration system also can be used to chill rail cars or truck trailers. Surface damage occurs to carcasses due to the water accumulation when they hang in the warm air during loading and in the

initial stage of transit while the vehicle's refrigeration system is stabilizing the temperature at the desired level. Condensation also damages packaged meat products.

Quick chilling can be accomplished in both trucks and rail cars with either a simple permanent injection system or an easy-to-use temporary setup. After loading, hoses from the storage tank are connected to the truck or car. A predetermined amount of CO₂ vapor is then fed into the vehicle, reducing the temperature to the desirable level. It requires only minutes to free the truck's refrigeration equipment from the job of dissipating the heat load introduced during loading and enables it to work on the heat passing through the insulation.

For maximum efficiency in truck pull-down it is recommended that the vehicles be equipped with permanent piping. Under such an arrangement the liquid CO₂ is piped to a discharge orifice located at ceiling height when the truck doors have been closed. In the temporary systems, the refrigerant is piped into the truck through the door opening and discharged at the floor level.

After washing and steam cleaning, many hours of rail car and truck use are lost while the vehicles are slowly cooled before loading. A blast of liquid carbon dioxide through either a permanent injection system or a temporary portable unit will cool a vehicle immediately. Fewer rail cars and trucks are needed, switching charges are reduced and more flexible operations can be realized when portable refrigeration is employed in this manner.



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Panel of Scientists and Government Officials Reassures Super Market Institute on Food's Plentitude and Purity, But Warns Against Reckless Tampering With Modern Methods

WHOLESOMENESS of the nation's food supply, and the contribution of chemicals to food's abundance, convenience and year-'round variety for consumers at all economic levels were pointed up by a panel of scientists and government officials last week at the 23rd annual convention of the Super Market Institute in Atlantic City.

The panel discussion on "The Good in Your Food," arranged with the cooperation of the American Meat Institute, was taped by the Columbia Broadcasting Co. and broadcast later over the entire CBS radio network.

Members of the panel were Dr. Charles G. King, executive director of the Nutrition Foundation, Inc.; Dr. M. R. Clarkson, associate administrator, Agricultural Research Service, U. S. Department of Agriculture; Dr. Herrell DeGraff, Babcock professor of food economics at Cornell University; Commissioner George P. Larrick of the Food and Drug Administration, and Dr. Frederick J. Stare, chairman of the department of nutrition, Harvard School of Public Health. Dr. Detlev W. Bronk, president of the National Academy of Sciences, served as moderator.

Each of the panelists emphasized the need for continuous education of the public as progress is made in agriculture, food processing and good distribution.

There is a widespread notion, exploited by food faddists, that primitive man and the forefathers of today's population had an ideal food supply, Dr. King noted. However, the death, sickness and crippling disease rates were higher than at present and the life span was shorter.

"No nation in history has had for its entire population a food supply that would compare with our present supply in terms of nutritive value, safety, convenience, stability, variety, attractiveness and economic availability for everyone," Dr. King asserted. He refuted statements of

faddists about "impoverished soil," pointing out that the use of chemical fertilizers has resulted in improved crop yields and more food at lower cost and with higher nutritive quality for the public. The food industry also is giving further health protection at minimum cost by adding desired nutrients to specific types of foods, the Nutrition Foundation's director continued.

ARBITRARY: The "Delaney clause" of the Food Additives Amendment, Dr. King said, exemplified "a real danger that legal and arbitrary restrictions will not permit our citizens to use reason and judgment in the essential task of producing the best food supply in the world." He named many trace elements that are essential in minute quantities for optimum nutrition but are harmful if they are fed in large quantities.

"Our foods today are safer and more wholesome than ever before, and chemicals used on farms help make them so," the USDA's Dr. Clarkson declared. The ARS associate administrator said that chemicals have helped increase the productivity per man-hour of farm workers by 134 per cent in the last 20 years, compared to an increase of about 50 per cent in the productivity of workers engaged in the fields of manufacturing, trades and services.

Dr. Clarkson discussed the USDA inspection programs for meat and poultry and explained: "The various formulas, including all food additives, for meat and poultry products must have prior approval. Ingredients must meet high standards of safety and quality. Rigid controls are maintained to insure adequate cooking, cooling and storage facilities required to produce safe, high-quality foods."

While the typical family on a worldwide basis devotes about 60 per cent of its productive effort to obtaining food, the typical family in the United States acquires a far superior diet for barely one-quarter of its disposable income, Dr. DeGraff

of Cornell told the group. "We eat as well and as cheaply as we do," he observed, "only because of the enormous contributions which science has made to food production, processing and distribution."

Fully one-third of the quantity of food available now has resulted directly from new contributions of science discovered and applied during the lifetime of the present U. S. population.

OVERFLOWING STAND-STILL: Dr. DeGraff pointed out that the 1920 acreage of developed cropland has never been exceeded. For four decades the U. S. has lived on a static crop-producing land base, but the population has increased 70 per cent from 106,000,000 to 180,000,000 during those 40 years.

"The 180,000,000 are now eating better than the 106,000,000 did in 1920," he noted, "and the major factor in our ability to feed this sharply increased population and to upgrade the diets of all of us has been increased food yield per acre of land and per head of livestock."

Improvement in crop yields has been made possible only by the use of chemical fertilizers, the Babcock professor said, and improved animals have been able to produce their potential only by proper management and feeding, including feeds to which numerous chemical materials have been added to obtain desirable results.

"The chemical age and our unavoidable dependence upon it has created two new dimensions of the food industries," Dr. DeGraff continued. "First, appropriate chemical materials must be properly used and, second, scientifically-grounded legislation must be responsibly administered."

"Every segment of the food industries, including farmers, processors and distributors, shares a mutual pride in the high quality and wholesomeness of this nation's food. They are proud of the consumer confidence which they have earned over the years, and their greatest incentive is to continue that con-

fidence undiminished. Not only does a high sense of responsibility pervade the food industries, but the consumer has further assurance of quality and wholesomeness as a result of the highly competitive nature of the food business. No food product can today succeed except as its suitability for consumption is above suspicion. The food industries know this fact and put their reputations behind the products they offer to the public."

Food and Drug Commissioner Larrick agreed with the earlier speakers that great benefits have been made possible by the use of chemicals. However, he cautioned, the advances of chemical technology could not continue "if consumers should become convinced that the public health risk is not being adequately controlled by the best laws our society has been able to devise." Thousands of letters indicating a real public concern about the safety of food chemicals have been received by the FDA in the last few months, he said.

EXTREMES: The public, Larrick observed, is being "barraged with misleading information representing two extreme points of view." On the one side, he noted, writers are presenting the false notion that Americans are being poisoned by chemicals. On the other side, some segments of the food industry assert that the new Food Additives Law is stifling progress and shackling the industry.

"Such talk," Larrick continued, "is just as irresponsible as the alarmist yellow journalism. Of course, the new law requires change.

It was intended to require change. The change is toward greater food safety. It is not destroying the industry. But such talk, by a vocal industry minority, tends to convince consumers who learn about it that industry is concerned only about its profits and not about consumer safety. There are dangers from irresponsible use of potent chemicals. There are irresponsible users of these chemicals. We have case histories that prove the point. Fortunately, they are relatively few.

"Safety in the use of food chemicals is a 'must' if the food industry is to continue to enjoy consumer confidence. The law we now have represents the best Congress could develop after years of intensive study. We think it provides a way to assure safety and at the same time allow scientific progress."

Harvard's Dr. Stare presented some facts to counter the claims of food faddists that there is a difference between natural chemicals and those made in a chemical factory. These people are "comic chemists," he said. All foods are chemicals. All nutrients are chemicals. Human beings are composed of chemicals.

"As a physician and student of nutrition for the last 25 years," Dr. Stare went on, "I should like to state categorically that I do not know, nor have I ever heard, of one single case of ill health in man shown to have been due to the addition of approved additional chemicals to foods. And I say additional chemicals because I wish to emphasize again that all foods are composed of chemicals.

"All chemicals have some toxicity at certain levels. The level is low for

some such as copper and fluorine and high for others such as water and sugar. One cannot intelligently define toxicity without speaking of dosage. Neither can one define carcinogenicity—cancer-producing properties—without speaking of dosage, and dosage implies not only amount but time, how much over how long a period."

Dr. Stare discussed food enrichment and noted that it now is possible to fortify wheat with lysine and provide a cereal with a protein quality equivalent to that of meat and milk. He said food standards must be kept up to date with advances in knowledge if mankind is to benefit from the progress.

"Our foods are tasty, attractive and convenient, thanks to those with ideas and skill in food technology," Dr. Stare concluded. "Our foods are abundant, varied, nutritious, safe and health-promoting, thanks to modern science."

Wilson Declares Dividend

The board of directors of Wilson & Co., Inc., a Delaware corporation, has declared a dividend of \$1.0625 per share on its \$4.25 preferred stock for the period from April 1 to June 30, 1960, payable on July 1, 1960, to stockholders of record on June 13.

Denver Lamb Market Day

A special lamb market day for 4-H and Future Farmers of America members will be held June 23 at the Denver Union Stock Yards. The annual event is sponsored by Denver livestock market agencies, Denver Stockyards and others.



LEFT: Members of first graduating class of six two-week refresher courses for veterinarians at Meat Inspection Division's Veterinary Meat Hygiene Training Center, University of Chicago, were (l. to r.): 1st row—Alfred Godwin, Philadelphia; Roman Baranowskyj, Chicago; A. C. Norris, Newark, N. J.; J. K. Payne, San Francisco; R. K. Burroughs, Los Angeles; Ralph D. Schwake, Dubuque. 2nd row—Richard Wagner, South St. Paul; James Willis, Cincinnati; C. W. Harris, Denver; Rayford Albritton, Augusta, Ga.;



Walter Huber, Sioux City; Jean Pavelka, Houston; Arthur High, Kansas City. 3rd row—Dr. C. H. Pals, associate director, MID, USDA; Dr. J. D. Lane, head of Chicago training center; Dr. V. H. Berry, circuit supervisor; Chicago station, and Dr. H. M. Steinmetz, assistant inspector of Chicago station. **RIGHT:** Helping Dr. Pals (center) "debug" his camera at graduation exercise are (l. to r.): Dr. Berry; Dr. R. F. Kielsen, inspector at Milwaukee station, and Drs. Steinmetz and Lane. All served as course teachers.

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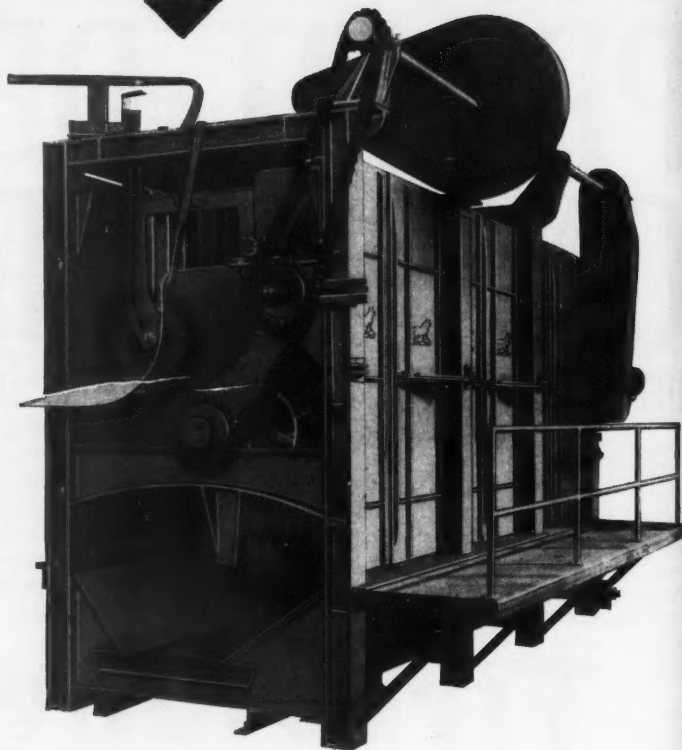
U bars are wide, long, and heavy. Overlapping side flights attached to conveyor plates prevent side friction and insure quick, positive delivery of hogs from tub into machine.

Frame and panels are of cast iron. Panels are heavily ribbed on outside to prevent warping, but smooth inside providing no ledges for attraction of corrosive scurf and moisture.

Motor mounted on top of dehairer drives machine thru roller chain to drive shafts. The drive to hair conveyor shaft is thru roller chain and bevel gears, and operates independently.

The lower shaft with ten point scraper stars runs at 55 RPM; the upper shaft with six point scraper stars runs at 100 RPM. Both shafts turn in the same direction.

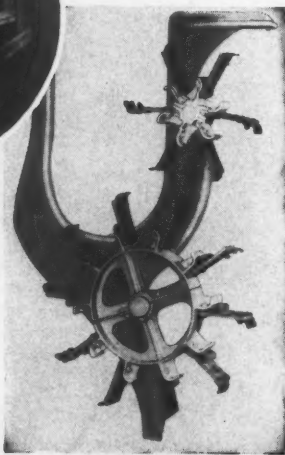
Spray pipes for spraying hogs with hot water are provided; a recirculating hot water box can be incorporated if desired.



Discharge end showing heavy U bars and spiral formation of belt scrapers.



Jumbo U bar with 10 point star on lower shaft and 6 point star on upper shaft.



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Scientists Present Research Papers On Curing, Proteins, Sausage Flavor

HAM CURING, evaluation of pain in animals, ultrasonics, pre-slaughter treatment of pigs and other subjects were covered in detail by prominent researchers at the recent 12th research conference sponsored by the research advisory council of the American Meat Institute Foundation, Chicago, at the University of Chicago. Abstracts of some papers follow.

GROWTH OF MICROORGANISMS AT LOW TEMPERATURES

by J. L. Stokes, Washington State University.

There exists in nature a distinctive, important and inadequately investigated group of bacteria which possesses the unique ability to grow at low temperatures at or close to 0° C. These low-temperature bacteria, commonly called psychrophiles, are widely distributed in nature. They occur in large numbers in soil, water, foods and other habitats where they carry out important beneficial or harmful chemical transformations at temperatures which are too low for the growth of other types of bacteria. In addition to psychrophilic bacteria, there are also psychrophilic yeasts and molds.

Psychrophiles grow well at 0° C. even in the absence of oxygen and can also develop at temperatures as low as -10° C. At these low temperatures, psychrophiles multiply, produce pigments, ferment carbohydrates, decompose proteins and exhibit other biochemical activities.

The greatly increased use of frozen and especially chilled foods in recent years and the increasingly longer periods of time between their production and consumption have emphasized the importance of psychrophilic microorganisms in the food industries. Frozen foods, which normally are processed and stored at temperatures too low for microbial growth, frequently undergo spoilage by psychrophiles because temperatures are allowed to rise in wholesale distribution channels, in stores and in the home. Large losses of meat, fish, poultry, dairy products and other foods due to undesirable odors, flavors and colors produced by psychrophiles frequently occur.

MICROBIOLOGY OF HAM CURING

by L. Leistner of Bundesforschungsanstalt für Fleischwirtschaft, Kulmbach, Germany.

For the past three years, studies concerning the microbiology of meat curing, especially ham curing, were undertaken at the Bundesforschungsanstalt für Fleischwirtschaft in Kulmbach.

In Germany, the following procedures are practiced in ham curing: 1) cover brines which consist of 10 to 25 per cent of a used brine are added; 2) both nitrate and nitrite are added to the cover and pumping brines, and 3) hams are held for approximately 10 days at 6° to 8° C. for curing and ripening. Under these conditions, microorganisms can influence the curing process.

It has been observed that members of the family *Spirillaceae* have a desirable influence upon color, and *Micrococcaceae* and optimal mixed cultures influence the flavor of hams. The *Lactobacteriaceae* aid in maintaining the stability of the cover brines.

Undesired alterations of the meat occur if the delicate balance of the cover brine flora is disturbed. A preponderance of the *Spirillaceae* may cause putrefactive flavors, while an excess of lactobacilli and micrococci may result in a souring of the brine and the hams. Heat resis-

tant streptococci, or spores of *Bacillus* or *Clostridium*, may be introduced from pumping or cover brines, and may result in spoilage of the heat processed hams during storage.

From these studies, factors affecting the growth of bacteria during the curing process were elucidated and methods for controlling the quality of brines were developed.

Results were used to give advice to meat packers with respect to the equipment and temperature to be used in the curing room, the salt, protein and sugar content of brines, etc. Methods were also worked out by which technicians in a laboratory can check the pH, redox potential, nitrite content, CO₂ content and presence of desired and undesired microorganisms in the brines.

BASIS OF EVALUATION OF PAIN IN ANIMALS

by R. L. Kit-chell, M. W. Stromberg, J. P. Arnold and J. M. Lagerwerff, University of Minnesota.

The problem of determining the effect of an externally applied stimulus upon the subjective "feelings" or perception in an animal is particularly difficult. Definitive evidence that animals feel pain, sorrow or other unpleasant or pleasant sensations is lacking. Evidence that animals have such feelings is usually obtained by drawing analogies from similar human experiences (anthropomorphism).

Criteria most often used involve observations of the behavior of the animal. These criteria are mostly subjective and are often inconclusive because of difficulties in eliminating bias on the part of the observer. In animals stunned or rendered immobile prior to slaughtering, the procedure may so seriously interfere with the motor re-



AMIF's research advisory council, which sponsored 12th research conference at University of Chicago, meets each year to review its program with administrative staff and division chiefs of American Meat Institute Foundation.

sponses (i.e., behavior) that interpretation from behavior alone may be misleading and give no information about the "psychic" or conscious state of the animal.

Other useful methods for determining the ability of an animal to "perceive" pain, etc., are to make analogies based on comparative anatomy and physiology. These methods are more readily quantitated (i.e., objective) as they may be expressed in physical units. The purpose of this report will be to discuss methods used in evaluating pain in human beings and animals including behavioral, anatomical and

the physiological techniques.

Discussed are useful procedures for investigating pain in animals, particularly in stunned or unconscious animals: blood pressure, heart rate, respiratory rate and electroencephalographic activity.

PROTEIN INVESTIGATIONS AT THE USDA BELTSVILLE MEAT LABORATORY by W. L. Sulzbacher, R. J. Gibbs, C. E. Swift and A. J. Fryer, Agricultural Research Service, USDA.

Protein research at the meat laboratory has been aimed at obtaining basic information about the proteins

in beef and other meat animals with the ultimate purpose of using this information in the handling of meat and meat products.

The water-insoluble, salt-soluble protein components of various bovine muscles have been obtained and analyzed ultracentrifugally. Variations between muscles and as a function of storage time after slaughter have been observed. The contractile protein, myosin, has been isolated by an improved technique and its physical and chemical properties have been measured.

Both bovine and rabbit H-meromyosin, contrary to previous studies, were found to be heterogeneous. Bovine L-meromyosin was comparable to that from other sources. Bovine tropomyosin, also isolated for the first time, was likewise studied in both its physical and chemical properties.

The effects of pH and ionic strength on the water-holding capacity of meat residues were also measured. In general, water retention followed the pattern of fiber swelling in gelatin, wool fibers and similar substances and was therefore in accord with the Donnan membrane theory. Between pH 6 and 8 at high ionic strength, there was enhanced water retention which paralleled the release of the myosin meat fraction.

CATHEPTIC ENZYMES IN MUSCLE by Arnold Kent Balls, Purdue University.

Cathepsins are proteolytic enzymes normally resident in tissue cells, rather than excreted therefrom. Before discussing the cathepsins, a quick glance at proteins and proteolysis is indicated.

Proteinases are best characterized by observing their behavior toward certain synthetic substrates, yet this requires that the preparation be free from other enzymes that might have the same action. Hence, much troublesome purification is required. It appears that representatives of each of the three large groups of proteinases are found among the cathepsins, which are thus far from being alike.

The function of cathepsins is still a puzzle. They are good catalysts of protein-splitting only at pH levels which are not observed in the tissues where they occur. At physiological pH levels some cathepsins are known to catalyze transpeptidation, so they may be involved in protein synthesis.

Muscle contains relatively little active cathepsin and this has not been studied extensively. It may, however, be profitable to consider

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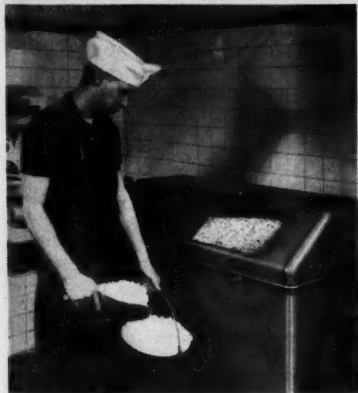
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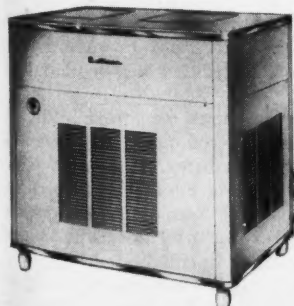
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what is known, what analogies exist with other tissue proteinases and what of the behavior of dead muscle may perhaps be attributed to catheptic action.

ULTRASONICS FOR EVALUATION OF LIVE ANIMAL AND CARCASS COMPOSITION by J. R. Stouffer and G. H. Wellington, Cornell University.

Studies have been conducted on live animals and carcasses of beef and pork with ultrasonics during various development stages of ultrasonic equipment for live animal and carcass evaluation.

Three groups of cattle were evaluated for rib eye area and external fat thickness at the last rib. Rib eye area and external fat thickness were measured on a cross-sectional outline which was sketched from individual soundings at specific locations on 54 cattle in an early study. Correlation coefficients between the measurements from the outlines and from the actual tracing of the carcasses were 0.35 for fat thicknesses and 0.49 for rib eye area.

A second trial with different equipment and modified technique resulted in correlation coefficients of 0.32 for fat thickness and 0.22 for rib eye area involving 82 cattle. The technique was improved and a third trial involving 16 cattle resulted in correlation coefficients of 0.54 for fat thickness and 0.85 for rib eye area.

A similar study with measurements taken at the thirteenth rib on 42 hogs resulted in correlation coefficients of 0.92 for external fat thickness and 0.70 for loin eye area.

Additional studies have indicated that thickness measurements can also be accurately made on carcasses of beef and pork with ultrasonics. Ultrasonics also appears promising as a tool for measuring the degree of marbling in live animals as well as intact carcasses.

PRE-SLAUGHTER TREATMENT OF PIGS AS IT INFLUENCES MEAT QUALITY AND STABILITY by J. Wismer-Pedersen and Hans Riemann, Danish Meat Research Institute, located in Roskilde, Denmark.

The properties of meat are greatly changed during the post-mortem glycolysis. The pH and the electrical resistance of the muscle tissue drop. The physical appearance of the meat changes from a dry (closed structure) to a wetter (open structure), and the water holding capacity decreases. It has been noted that the rate of the post-mortem pH drop in pork can sometimes be very fast. The water holding capacity and the

color are greatly reduced in such meat, which is called "watery pork."

Watery pork has been known for many years but it is only in recent years that it has been studied extensively. The direct cause of watery pork is still unknown, but it has been demonstrated that stress and excitement of the pigs increase the frequency of carcasses with watery pork. Carbohydrate rich feed has a similar effect and so has sugar-feeding prior to slaughter, if the feeding is not combined with resting of the animals.

The final or ultimate pH of pork can be reduced by sugar-feeding and resting, and if the rate of post-mortem pH drop is normal, watery pork or even reduced water holding capacity does not occur. The keeping quality of pork may be increased considerably by a lowered ultimate pH of the meat.

Electrical stunning may give rise to blood splashes in the muscles if the pigs are stuck later than five seconds after the termination of the electrical current. This stunning technique can also result in higher ultimate pH.

Apart from these effects, stunning (electrical or CO₂ gas) seems to have very little influence on meat structure and meat quality. Care must, however, be observed that the pigs do not get frightened when they are led to the stunning apparatus. That may cause rise in the frequency of watery pork.

By specific treatment before slaughter, such as injection of adrenaline, the glycogen depots can be

emptied completely. As a result, there is no post-mortem pH drop and the water holding capacity remains high.

It would be a desirable situation if we were able to produce pork with a good color, a good water holding capacity and a low pH. Such meat would be suited for almost any use. Unfortunately, a low pH is not generally compatible with a good color and a good water holding capacity.

A solution to this problem would be to use pork with low ultimate pH for purposes where the effect of pH on the keeping quality is of primary importance. Meat with higher pH could be used in cases where the water holding capacity is of more importance than the influence of the meat pH on keeping quality.

FACTORS INFLUENCING QUALITY OF COOKED PORK by C. Edith Weir, AMIF.

The eating quality of pork varies considerably in tenderness, juiciness and flavor while remaining quite palatable. The consumer may be only casually aware of these differences unless they result in marked reduction in quality. These differences are, however, obvious to taste panel members who have evaluated, with care, pork samples from a number of sources.

Breeding and management practices quite possibly affect the cooked pork quality. The age of the animal at slaughter, whether determined by breed or feeding regime, will have an effect. Tenderness in beef has been shown to be a heritable factor and it is probable that this is also true for pork. Other genetically-linked factors, such as marbling, may contribute to eating quality although it is not easy to establish whether their influence is direct or through genetic association.

A most important factor in meat eating quality is the manner in which the meat is cooked. Several years ago, studies were carried out which indicated that slower cooking, that is, cooking at low temperatures, increased the yield and tenderness of cooked meat. Recent studies on beef, by Dr. Cover at Texas, have indicated differences in various aspects of tenderness for broiled and braised beef steaks.

There is almost no information on the response of pork to different cooking procedures. Studies on pork quality in progress at the American Meat Institute Foundation are yielding interesting information with regard to cooking methods.

Pork roasts are more tender, juicy and flavorful than broiled or



HEAT-AND-SERVE beef, chicken and turkey pies made at new Swift & Company plant in Union, Mo., are distributed nationally in cartons supplied by boxboard and folding carton division of Continental Can Co. The 8-oz. pies are packed in aluminum foil pie plates and frozen. Cartons are printed in yellow, red and dark and light blue. The carton design was created by Swift & Company.

Fairbanks NO 1

*a scale, our first one.
an imagination of iron, brass, copper and lead,
fashioned in a New England workshop.
inanimate.*

*but it spoke—
a different kind of language,
of pounds and ounces and fractions thereof
and it spoke only the truth.*

*it felt—
the roundness of grain, the smoothness of marble,
the sweetness of candy and the authority of gold.*

*it heard—
the sound of life, babies newborn
it cradled them and recorded their growth
until pounds and ounces were replaced
by years and months.*

*it traveled—
by packet boat down the Mississippi,
by clipper ship to England,
The Sandrich Isles, the Indies,
South America and China.
better known throughout the world
than anything else made in America.*

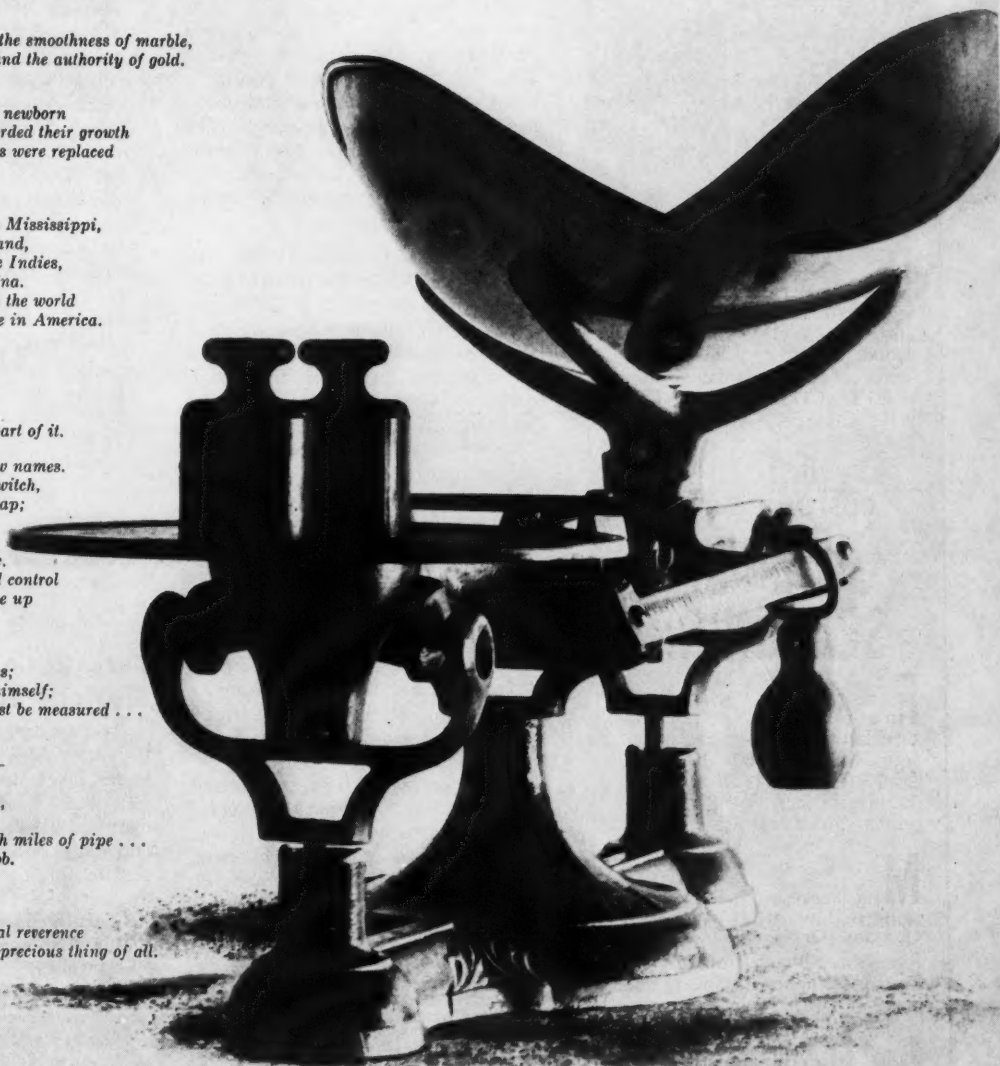
*it was relied on
by farmers, merchants,
scientists and doctors.
it witnessed history;
influenced it and was part of it.*

*its descendants have new names.
floaxial dial, mercoid switch,
reed switch and cotton lap;
remote control,
printomatic,
electronic and leveltronic.
all serve to evaluate and control
the substances that make up
the universe.*

*raw materials
or manufactured articles;
things unseen or man himself;
all have weight and must be measured . . .
our scales do the job.*

*and the new challenge—
weight in motion . . .
freight trains in transit,
trucks too busy to stop,
liquids coursing through miles of pipe . . .
our scales will do the job.*

*but this was our first—
Fairbanks No. 1
and we hold it in special reverence
for it weighed the most precious thing of all.
it weighed an idea.*



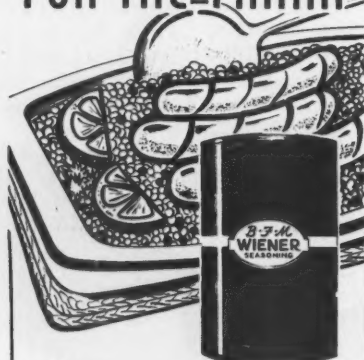
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braised chops from the same carcasses. High panel scores for pork roasts are not always accompanied by high scores for chops from the same source. The rate of temperature increase in roasts varies greatly among animals with ranges observed as great as 1° to 3° F. per minute. These rate differences cannot be completely explained by roast weight or fat cover.

Oven temperatures of 300°, 350° and 400° F. have been compared. Preliminary data indicate that a 350° F. oven temperature results in better flavor, tenderness and juiciness than either 300° or 400° F. The significance of cooking rates, whether due to in-roast factors or environmental temperatures, is being considered.

GAS CHROMATOGRAPHY FOR MEAT FLAVOR RESEARCH by F. L. Kauffman, Swift & Company.

Gas-liquid chromatography has been a very useful analytical tool in the characterization of flavors in foods, such as strawberries, and of flavoring additives, such as spice oils, where the flavor sensations are predominantly due to high volatile compounds.

In meats, the over-all flavor sensation is often dependent largely on essentially non-volatile components which are better studied by other methods. However, volatile compounds are often produced in meat products during curing, irradiation or smoking, and these volatile compounds can be detected, identified and measured using gas-liquid chromatography.

These analyses provide an objective method of following the chemical changes occurring at various stages in processing. These changes are related to the development of the final product flavor and aroma. Since the volatile compounds are often present in very low concentrations, or are strongly absorbed on the protein structure, they must be extracted and concentrated before analysis. Recent improvements in gas-liquid chromatography detector sensitivities make concentration problems less difficult.

AN EFFECT OF IRON AND SODIUM CHLORIDE ON FLAVOR IN SAUSAGE by V. G. Moskovits and E. W. Kielsmeier, associated with Oscar Mayer & Co.

Deterioration of product flavor as a result of oxidative reactions is an ever-present problem in the food industry. The situation is especially acute in fat-containing foods, such as sausage, because these products are readily attacked by atmospheric

oxygen. Certain chemical agents have a marked ability to accelerate oxidative reactions while others tend to inhibit oxidation. The action of potential pro- or anti-oxidants appears to be quite dependent upon the exact nature of the oxidation-prone system in which they are found. This paper will consider a typical mixture of sausage ingredients as the oxidation-prone system.

Almost all sausage contains pro- and anti-oxidants in the form of heme pigments and spices, respectively. In addition, it will usually contain deliberate additions of sodium chloride, as well as contaminating metals from processing equipment. This paper will describe the pro-oxidant activities of several metals and sodium chloride, with emphasis on the effect of iron. Apparently, even small quantities of iron can accelerate oxidative processes in sausage mixtures. An anomalous effect found for copper will be pointed out.

It may be concluded from results that contamination of sausage products with iron should be scrupulously avoided. An improvement in the general quality of sausage flavor would undoubtedly occur if corrosion-resistant metals such as nickel-chromium-iron alloys were used exclusively in fabrication of sausage-making equipment.

Burns & Co. Net Earnings Rise on Peak Operations

Net earnings of Burns & Co., Ltd., Calgary, Alta., in the fiscal year ended December 30, 1959, amounted to \$1,362,701, a substantial increase over the 1958 earnings of \$702,523 and more in line with normal years' results, Reginald S. Munn, president, disclosed in the company's annual report to shareholders.

Meat packing operations accounted for \$1,056,457 of the profit, returning 66¢ on each \$100 of sales. Net income from packinghouse operations in 1958 was \$356,279. The company received \$306,244 in dividends from subsidiaries in other fields in 1959, a decline of \$40,000 from 1958.

"The outstanding feature of the year's operations was the increase in tonnage and dollar sales, which established new record highs," Munn reported. Burns & Co. sales amounted to \$159,761,274, and aggregate sales of the company and its subsidiaries were \$215,000,000.

The company's capital expenditures totaled \$1,363,000 in 1959, down \$207,000 from the previous year, and net working capital increased \$178,000 to total \$7,467,000.

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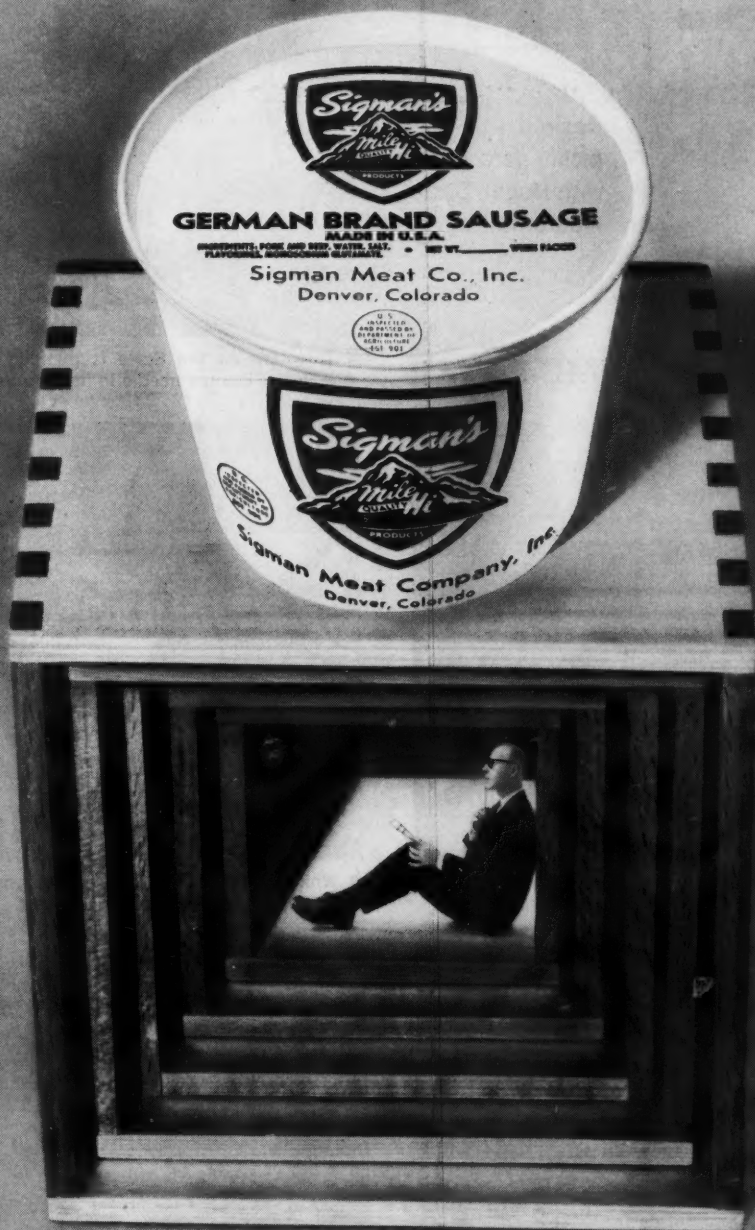
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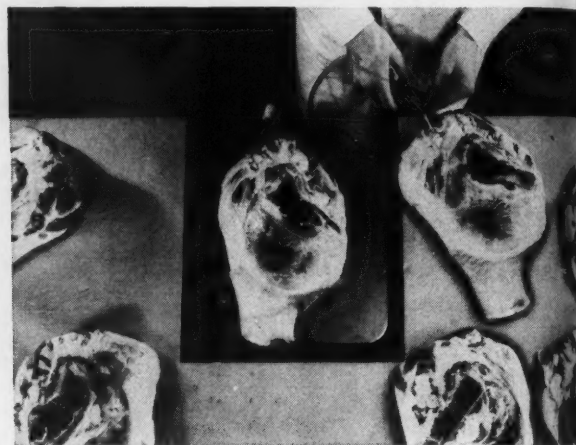
HAM PUMPING TIME-SAVER



2 Operator pushes pumped ham into receiver, at the same time moving ham from left onto the Scale.



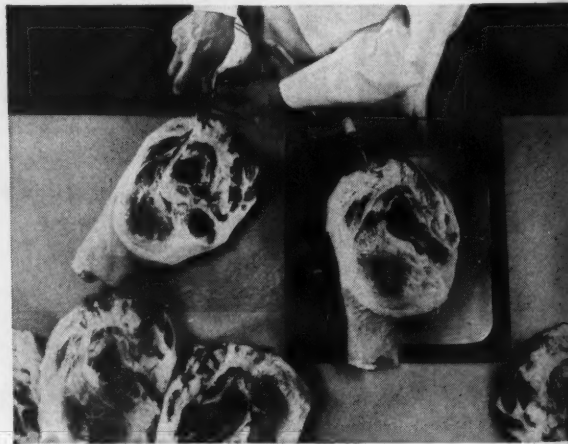
1 The ham on the Scale is pumped automatically, while operator clamps needle in ham on left.



3 While ham is automatically pumped, operator inserts needle in the artery of the ham on the right.



4 Ham on Scale has been pumped, so operator pushes it towards receiver, moving right ham onto Scale.



5 Cycle is now complete, and while ham on Scale is pumped, operator is inserting the needle in the next ham on the left.

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[Continued from page 13]

addition to solving the dusting problem the arrangement brings about a better blending of the seasoned milk solids and the added moisture with the emulsion. The slurry flows over the entire emulsion mass rather than being confined to a narrow band as is the case when the ingredients are added dry, sausage maker Fritz reports.

From the bowl cutter the emulsion is discharged directly into the horizontally mounted Griffith Mince Master. The feed hopper of this unit fits snugly under the discharge opening of the cutter. Meat from the horizontal unit is discharged directly into the bowl of another Mince Master. The emulsion from this unit is discharged into the hopper of the Kent continuous flow stuffer. This unit has a pump that pulls a vacuum continuously on the sealed stainless steel hopper and, consequently, the emulsion flowing from the Mince Master meets no air resistance.

Management uses three emulsifying machines to get a smooth velvety texture in its product in minimum machine time, claims Lampert.

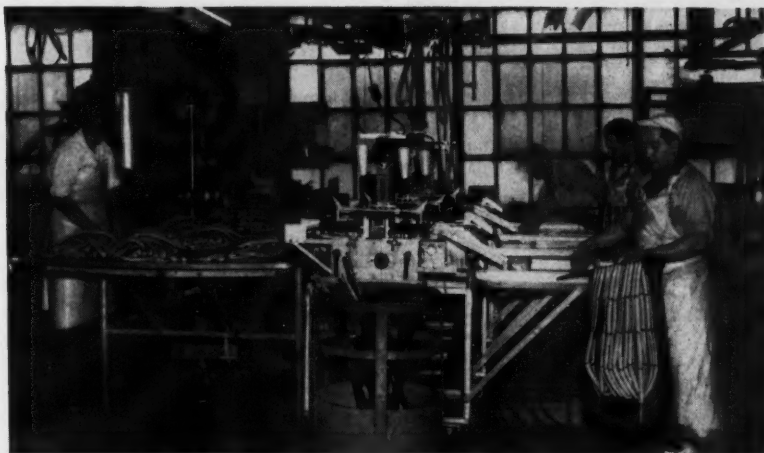
The stuffer has several controls which permit the manufacturing room to prepare emulsion for four other stuffers intermittently. A trip-out switch stops the last Mince Master if the hopper is full and a red light on top blinks as the hopper approaches empty.

The connection between the hopper and the last emulsifier is an easy-break coupling. If other fine-cut products are being stuffed, the connection is broken and the flow from the vertical emulsifier is directed into St. John stainless steel charging buckets. After several batches have been made the stainless steel pipe is reconnected and the product flows into the hopper.

The continuous stuffer has a clutch-engaged pump. The clutch is thrown in and out by a control activated by a solenoid mounted to the stuffing cock. The firm has used five Linker Machine linkers all served by one stuffing operator, Lampert says.

The stuffing operator is aided in his work by a Linker Machine casing sizer. As the product is stuffed, the strand strikes a baffle plate on the table that curls it. The pressure from the stuffer and the resistance of the baffle are constant so that the strand curls into sections of approximately uniform size.

One operator working at the stuffing table moves the strands to the linking machine stations and



ABOVE: One employee ties the strands flowing into the four linking machines, each of which has an operator for smokestick placement. RIGHT: Force of stuffing curls the strand into sections as the sausage strikes the baffle plate. Employee uses mechanical casing holding device which helps in stuffing the strand.



ties the strands together. Since the stuffing machine's capacity is considerably greater than that of the linkers, the operator always has plenty of sausage to keep ahead of the machines.

The stuffer packs the emulsion in the casings and there are no pockets in the links. There is a slight saving in casing costs, reports Keller. Whenever the vacuum pump is not functioning, this fact is quickly detected through the difference in link length.

An operator at each linking machine places the sausage on sticks and transfers these to cages for movement to the smokehouse alley.

The plant is equipped with a battery of air-conditioned Atmos smokehouses. The smoked frankfurts are finished in a Jourdan cooker and are then moved into a new shower spray. The chilling of the frankfurts has been speeded by using nozzles that produce a mist and water is saved.

The second major production aid is the Advanced Engineering Gebhardt snap chill cabinet. This unit and the vertical Howe Ice Machine compressor were installed by Arctic

Engineering. The booster compressor supplies about 10 tons of refrigeration needed for the Gebhardt snap chill unit.

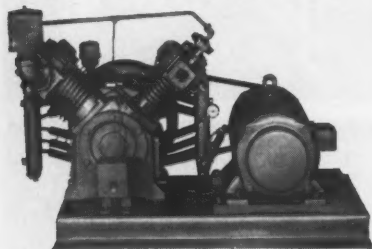
The cabinet is used primarily during peak periods when the normal cooler facilities are too small. It also is used on very hot days when management wants to hold the manufacturing-distribution cycle to an absolute minimum to assure product quality to the customer.

The two-fan unit has a capacity of six cages. The temperature of frankfurts is pulled from the shower level of 100° F. down to about 46° F. within 6 minutes. In a conventional cooler the product must be held overnight before it is ready for machine peeling. With the quick chill system the frankfurts can be on their way in packages to a customer within 30 minutes after leaving the smokehouse, says Jourdan.

The firm has installed a Kartridg-Pak chub forming machine which turns a couple of day's requirements in a short run. The employees are then free to stuff other large link or stick products, Jourdan points out. Chub products can be made frequently to assure freshness.

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Swift Says Pension Trust Is in 'Excellent' Shape

The pension trust of Swift & Company, Chicago, with assets of \$209,000,000, is paying pensions to more than 12,500 persons. Included are 8,118 retired employees and 4,389 widows and minor children. R. W. Reneker, company vice president and chairman of the pension board, gave these figures to employees.

"The Swift pension trust is in excellent financial condition," Reneker said. "Actually, it is stronger than indicated by the assets, which are reported at cost rather than at today's higher market values."

The trust embodies Swift's 44-year-old pension plan, which is one of the oldest among industrial firms. In 1925, company pension funds were placed in an irrevocable trust. Since then, \$122,000,000 has been paid out in pension benefits. Employees pay no part of the cost of providing pensions.

In 1959, nearly \$8,750,000 was added to the fund from dividends, interest and profits realized on securities sold during the year, Reneker reported. This, together with the company's contribution of \$4,356,193 last year, exceeded 1959 pension payments by about \$4,000,000.

"Swift pensions," Reneker pointed out, "are in addition to social security payments. For a retired married couple, Swift's average monthly pension and social security payments exceed \$200. The Swift plan provides for disability retirement after 20 years of continuous service, and also for early retirement under certain conditions."

Australians Butcher 11,000 Kangaroos For Export Meat

More than 11,000 kangaroos were recently killed for meat for export in southwestern Australia over a 10-week period. The meat was boned, with each kangaroo yielding an average of 30 lbs. of edible meat.

The meat was sent to Europe and America in cases branded: "Boneless Kangaroo Meat—Product of Australia." The consignment was estimated to be worth about \$20,000.

Kansas Livestock Project

Production and marketing potentials of the livestock industry in Kansas will be examined in a research project sponsored by the Kansas City, St. Joseph and Wichita livestock markets. The project, which will take about a year to complete, will be directed by Dr. John McCoy, working through Kansas State University.

HOT or COLD



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Esskay Hits Road Again with 'Load O' Loot'



"PASSENGERS" ON one of transit bus "Load O' Loot" spectaculars of Schludberg-Kurdle firm are (l. to r.): Thomas J. Kurdle, vice president for merchandising; O. B. Smith, vice president in charge of sales; Theodore Schludberg, president, and Albert Kurdle, senior vice president of firm.

Repeating its successful promotion of last year, The Wm. Schludberg-T. J. Kurdle Co., Baltimore, has put its \$20,000 "Load O' Loot" mobile display on the road again in Maryland, Virginia, Delaware, the District of Columbia and Pennsylvania.

The transit bus display is packed with prizes contestants can win by describing the flavor of Esskay franks in one word or three hyphenated words. All details are on the package. The display will be shown at heavy shopper traffic locations, such as shopping centers, town squares and central city street intersections.

Backing up the promotion will be saturation radio spots, weekly 500-line ads in local newspapers, billboards and point-of-purchase material. The grand prize winner will

receive everything "except the truck" in the "Load O' Loot" display which includes a 1960 Chevrolet station wagon, 1960 Corvair sedan, Baldwin acrosonic piano, natural mink stole, sterling flatware, china, television set and many other items.

There will be four second prizes of mink stoles, six third prizes of 21-inch TV consoles and 400 additional prizes of Esskay canned hams. The dealer whose customer wins the grand prize will be awarded a stereophonic high-fidelity phonograph. In addition to the grand prize, a weekly prize will be awarded for eight weeks to encourage repeat visits to stores. The winner may select any one prize in the "Load O' Loot" except the cars and also will be eligible for the grand prize. The contest will end on July 2.

Arkansas Permits More Milk, Binder in Sausage

The Arkansas State Board of Health has amended the state's sausage regulations to permit a maximum of 5 per cent of dried skimmed milk solids and 12 per cent of binder (starch, soybean flour or flour) in sausage. The previous limits were prescribed at 3½ and 10 per cent, respectively.

The Arkansas Independent Meat Packers Association had proposed an 8 per cent skimmed milk limit and a maximum of 15 per cent binder. Coupled with the new limits is a strict requirement against exceeding the ceilings. The old regulations permitted a margin of error.

Will Check for Residues

Florida's State Cabinet turned over to the State Agriculture Department \$27,500 in emergency funds to help pay for mobile laboratories used to check for dangerous pesticide residues on food crops. Gov. LeRoy Collins pointed out, however, that "there is no great fear that contamination has occurred or will occur."

State Insecticide Study

A resolution providing for the creation of an interim committee to study the use of insecticides was approved by the Michigan Senate before the recent adjournment of the legislative assembly of the midwestern commonwealth.

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REICH'S
MARK IV
BEEF LOADER

ALL MEAT . . . output, exports, imports, stocks

Meat Production Scores Substantial Increase

Production of meat under federal inspection for the week ended May 7 scored a substantial increase after the slight gain of the previous week. Volume of production last week at 434,000,000 lbs. was about 20,000,000 lbs. larger than for the previous week and about 33,000,000 lbs. larger than for the same May week last year. In livestock slaughter, only calves failed to contribute to the larger aggregate meat output. Cattle kill, while up by about 20,000 head for the week, numbered about 29,000 head larger than a year ago. Hog slaughter, which has held an unsteady edge over last year, was about 120,000 head larger than a year ago. Estimated slaughter and meat production by classes appear below as follows:

Week Ended	BEEF		PORK	
	Number	Production	(Excl. lard)	Production
	M's	Mil. lbs.	M's	Mil. lbs.
May 7, 1960	370	222.4	1,360	187.5
April 30, 1960	350	207.2	1,325	183.5
May 9, 1959	341	205.7	1,240	172.6

Week Ended	VEAL		LAMB AND MUTTON		TOTAL MEAT PROD.	
	Number	Production	Number	Production	Number	Production
	M's	Mil. lbs.	M's	Mil. lbs.	M's	Mil. lbs.
May 7, 1960	92	10.9	275	13.2	367	24.1
April 30, 1960	92	10.9	255	12.5	347	23.4
May 9, 1959	88	10.6	252	12.0	340	22.6

1950-60 HIGH WEEK'S KILL: Cattle, 462,118; Hogs, 1,859,215; Calves, 200,555; Sheep and Lambs, 369,561.

1950-60 LOW WEEK'S KILL: Cattle, 154,814; Hogs, 641,000; Calves, 55,241; Sheep and Lambs, 137,677.

Week Ended	AVERAGE WEIGHT AND YIELD (LBS.)			
	CATTLE		HOGS	
	Live	Dressed	Live	Dressed
May 7, 1960	1,045	601	242	138
April 30, 1960	1,030	592	243	138
May 9, 1959	1,045	603	245	139

Week Ended	CALVES		SHEEP AND LAMBS		LARD-PROD.	
	Live	Dressed	Live	Dressed	Per cwt.	Mil. lbs.
May 7, 1960	210	119	98	48	—	43.3
April 30, 1960	210	119	99	49	—	39.7
May 9, 1959	213	120	98	48	14.0	42.7

U. S. Meat Animal Production Last Year Reaches Record High Of 52,700,000,000 lbs.; 8% Above 1958

Farm production of meat animals in 1959 was a record 52,700,000,000 lbs. live weight, or 8 per cent more than the 48,700,000,000 lbs. in 1958, according to the Crop Reporting Board. Cattle and calf production amounted to 56 per cent of the total farm production of meat animals in 1959, with hogs furnishing 41 per cent and the remaining 3 per cent from sheep and lambs. In 1958, cattle and calves represented 57 per cent of the total; hogs, 40 per cent; and sheep and lambs, 3 per cent.

Gross income (cash receipts plus value of home consumption) from meat animals amounted to \$11,400,000,000, 2 per cent less than the \$11,600,000,000 in 1958. The gross income in 1959 for cattle and calves was above that of a year earlier, but was lower on hogs and sheep and lambs. The increase in gross income from cattle and calves was due to larger marketings and higher prices, while for hogs and sheep and lambs the decrease was due to lower prices since marketings were up.

Production of cattle and calves in

1959 was 29,500,000,000 lbs., 7 per cent above the 27,700,000,000 lbs. in 1958. Gross income from cattle and calves in 1959 amounted to \$8,000,000,000, the highest for any year on record. The 1959 gross compared with \$7,600,000,000 in 1958.

Hog production last year was estimated at 21,400,000,000 lbs., up 10 per cent from the 19,400,000,000 lbs. the preceding year. The 1959 production was 15 per cent below the record of 25,400,000,000 lbs. in 1943. Gross income in 1959 from hogs at \$3,000,000,000 was 18 per cent smaller than the \$3,700,000,000 in 1958.

Production of sheep and lambs in 1959 amounted to 1,700,000,000 lbs., 3 per cent above 1958. Gross income was \$340,000,000 in 1959 compared with \$360,000,000 in 1958.

ANIMAL FOOD PRODUCTION

Canned food and canned or fresh frozen food component for dogs, cats and like animals, prepared under federal inspection and certification for the week ended April 16, totaled 5,191,516 lbs.

AMI PROVISION STOCKS

Provision stocks, as reported to the American Meat Institute, totaled 191,300,000 lbs. on April 30. This volume was 6 per cent above the 180,700,000 lbs. a year earlier.

Stocks of lard and rendered pork fat totaled 47,600,000 lbs. for an 11 per cent drop from 53,500,000 lbs. in stock about a year earlier.

The accompanying table shows stocks as percentages of holdings two weeks and a year earlier.

	Apr. 30 stocks as percentage of inventories on	
	Apr. 16 1960	May 2 1959
HAMS:		
Cured, S.P.-D.C.	100	76
Frozen for cure, S.P.-D.C.	126	88
Total hams	119	83
PICNICS:		
Cured, S.P.-D.C.	100	74
Frozen for cure, S.P.-D.C.	134	263
Total picnics	126	132
BELLIES:		
Cured, D.S.	104	118
Frozen for cure, D.S.	108	38
Curewd, S.P.-D.C.	99	83
Frozen for cure, S.P.-D.C.	105	116
OTHER CURED MEATS:		
Cured and in cure	104	84
Frozen for cure	117	81
Total other	112	82
FAT BACKS:		
Cured D.S.	117	76
FRESH FROZEN:		
Loins, spareribs, neckbones, trimmings, other—total	108	132
TOT. ALL PORK MEATS	109	106
LARD & R.P.F.	103	89
PORK LIVERS	91	97

BRITISH MEAT IMPORTS

British bacon imports by country of origin and imports of other meats by kinds for the first three months of 1958-59 and 60 were reported by U. K. sources as follows:

Country	BACON		
	1958	January—March 1959	1960
Commonwealth	460	652	943
Irish Republic	8,086	4,685	4,355
Sweden	2,151	1,881	2,758
Denmark	57,866	57,407	70,600
Poland	12,798	11,800	12,390
Holland	6,882	5,160	8,110
Other	474	1,068	1,870
TOTALS	88,717	82,653	100,043

Type	FRESH MEAT		
	1958	January—March 1959	1960
Beef, Veal	95,686	85,407	83,192
Mutton, Lamb	107,566	113,285	112,800
Pork	4,831	4,018	5,167
TOTALS	208,083	202,710	201,057

Type	VARIETY MEATS		
	1958	January—March 1959	1960
Beef			
Tongues	1,462	1,640	1,807
Other	7,748	7,624	6,621
Veal	571	521	486
Mutton	1,166	1,066	1,380
Lamb	4,306	4,105	5,288
Pork	2,335	3,122	4,848
Rabbits	3,170	2,321	2,733
TOTALS	20,758	20,399	23,270

Type	CANNED MEAT		
	1958	January—March 1959	1960
Beef tongues	1,785	1,311	1,168
Corned beef	11,553	8,451	6,730
Other beef	9,112	9,970	9,928
Veal	781	546	546
Corned mutton	1,214	285	2,175
Other mutton	854	868	2,048
Bacon, hams	5,758	5,620	8,442
Pork, incl. tongues	8,084	8,138	10,740
All other	3,960	3,138	3,410
TOTALS	43,101	38,337	45,400

THE NATIONAL PROVISIONER, MAY 14, 1960

PROCESSED MEATS . . . SUPPLIES

U. S. Meat Imports Continue Low In March

Arrival of 54,449,201 lbs. of foreign meat into the United States in March represented the second smallest volume of such movement in two years. Imports of 53,301,057 lbs. in February were about the lightest since March 1958. March shipments of meat compared with 71,489,148 lbs. in March last year and the all-time record of 105,579,000 lbs. in August 1959. Australia continued to be the top country as the source of our meat imports. That country contributed 12,570,479 lbs. of our meat imports in March. Our largest imported supply of pork was 5,797,262 lbs. of canned ham from Holland. U. S. meat imports by country of origin are listed below as follows:

Country of origin	Fresh meats and edible offal			—Cured meats—		
	Beef, Veal Pounds	L & M Pounds	Pork Pounds	Beef Pounds	Pork Pounds	
Argentina	.....	.....	.....	.....	.....	.....
Australia	9,172,552	3,383,527	.....	.....	.....	.....
Canada	1,649,937	1,964	2,503,755	542	506,361	.....
Denmark	.....	.....	.....	.....	40,807	.....
Germany	.....	.....	.....	.....	23,709	.....
Holland	7,193,953	.....	.....	.....	8,232	.....
Ireland	5,991,699	.....	.....	.....	26,730	.....
Mexico	.....	.....	.....	.....	.....	.....
New Zealand	2,763,610	77,238	10,224	.....	.....	.....
All others	3,689,824	197,637	.....	7,550	14,414	.....
Totals—March 1960	30,461,575	3,660,366	2,513,979	8,092	620,253	.....
March 1959	32,370,345	2,308,196	4,796,887	12,235,671	966,076	.....

Country of origin	Canned meats			Cooked beef Pounds	Sausage treated Pounds	General miscel. Pounds	Totals Pounds
	Beef Pounds	Pork Pounds	Miscel. Pounds				
Argentina	3,102,453	.....	.....	825,522	.....	26,320	3,954,295
Australia	14,400	.....	.....	.....	.....	.....	12,570,479
Brazil	394,876	.....	.....	.....	.....	12,208	407,084
Canada	1,511	173,455	18,080	.....	1,933	192,270	5,049,808
Denmark	9,000	3,291,385	194,320	.....	248,304	7,680	3,791,496
Germany	.....	344,929	571	.....	50,704	.....	419,913
Holland	10,293	5,797,262	41,283	.....	5,523	.....	5,862,593
Ireland	.....	.....	.....	.....	.....	.....	7,220,683
Mexico	.....	.....	.....	.....	.....	.....	5,991,699
New Zealand	.....	.....	.....	.....	.....	526	2,851,598
Paraguay	161,078	.....	.....	.....	.....	.....	161,078
Poland	.....	1,335,785	272,498	.....	.....	13,228	1,621,506
Uruguay	315,111	.....	.....	.....	.....	1,680	334,711
All others	.....	54,186	94,162	.....	143,702	10,783	4,212,258
Totals—Mar. '60	4,008,722	10,997,002	638,829	825,522	450,166	264,695	54,449,201
Mar. '59	4,490,023	12,278,403	1,450,789	.....	127,755	465,003	71,489,148

Note: In addition to the above, March 1960 imports included 38,500 pounds of horse meat from Mexico.

EAST COAST MEAT IMPORTS

Arrival of foreign meat at New York, Boston and Philadelphia, as reported in pounds by the USDA:

WEEK ENDED APRIL 30, 1960
 From Argentina—402,563 canned beef. Australia—536,727 boneless beef, 143,750 boneless mutton and 70,878 boneless lamb. Canada—23,051 carcass veal. Brazil—59,591 canned beef. Czechoslovakia—12,300 cured pork. Denmark—208,607 cured pork. Germany—6,327 cured pork. Holland—313,547 cured pork. Ireland—1,127,180 boneless beef. New Zealand—158,501 boneless mutton.

CHICAGO LARD STOCKS

Stocks of drummed lard in Chicago were reported in pounds by the Board of Trade as follows:

	May 6 1960	May 9 1960
P. S. lard (a)	5,269,313	5,269,313
P. S. lard (b)	.....	23,709
Dry rendered lard (a)	1,316,949	1,316,949
Dry rendered lard (b)	911,363	911,282
TOTAL LARD	7,497,625	7,497,544

(a) Made since October 1, 1959.
 (b) Made previous to October 1, 1959.

Meats Stronger, Gen. List Off

Meat prices gained some strength in the week ended May 3 as the average wholesale price index on the commodity rose to 95.9 from 95.7 for the previous week. The average commodity price index for the period at 119.8 was steady with the previous week, but down after hovering over the 120.0 level for a few weeks. The average wholesale meat price index for the same week last year was 102.0 and the average primary market price index, 119.6.

DOMESTIC SAUSAGE

Pork sausage, bulk, (ccl. lb.)	.....
in 1-lb. roll	30 @ 37
Pork saus., sheep cas.,	.....
in 1-lb. package	50 @ 55
Franks, sheep casing,	.....
in 1-lb. package	63 @ 69
Bologna, ring, bulk	47 @ 54
Bologna, a.c., bulk	35 @ 41
Smoked liver, a.c., bulk	37 @ 45
Polish sausage, self-	.....
service pack	58 @ 71
Smoked liver, n.c., bulk	47 @ 53
New Eng. lunch spec.	61 @ 66
Oliver loaf, bulk	40 1/2 @ 53
Blood and tongue, n.c.	47 1/2 @ 56
Blood, tongue, a.c.	45 1/2 @ 54
Pepper loaf, bulk	48 1/2 @ 55 1/2
Pickle & Pimento loaf	43 1/2 @ 53
Bologna, a.c., sliced	.....
6, 7-oz. pack, doz.	2.61 @ 3.60
New Eng. lunch spec.,	.....
sliced, 6, 7-oz., doz.	3.93 @ 4.92
Oliver loaf,	.....
sliced, 6, 7-oz., doz.	2.93 @ 3.84
P.L. sliced, 6-oz., doz.	3.55 @ 4.80
P&P loaf, sliced,	.....
6, 7-oz., dozen	2.78 @ 3.60

DRY SAUSAGE

(Sliced, 6-oz., lb.)	.....
Cervelat, hog bungs	1.08 @ 1.10
Thuringer	65 @ 67
Farmer	89 @ 91
Holsteiner	78 @ 80
Salami, B.C.	98 @ 1.00
Salami, Genoa style	1.10 @ 1.12
Salami, cooked	51 @ 53
Pepperoni	88 @ 90
Sicilian	1.00 @ 1.02
Goatsburg	89 @ 91
Mortadella	60 @ 62

CHGO. WHOLESALE

SMOKED MEATS

Wednesday, May 11, 1960	.....
Hams, to-be-cooked,	.....
14/16, wrapped	51
Hams, fully cooked,	.....
14/16, wrapped	52
Hams, to-be-cooked,	.....
16/18, wrapped	50
Hams, fully cooked,	.....
16/18, wrapped	51
Bacon, fancy, de-rind,	.....
8/10 lbs., wrapped	43
Bacon, fancy sq. cut, seed-	.....
less, 10/12 lbs., wrapped	40
Bacon, No. 1, sliced 1-lb.	.....
heat seal, self-service pkg.	53

SPICES

(Basis Chicago, original barrels, bags, bales)

Whole Ground	.....
Allspice, prime	86
resifted	99
Chili pepper	56
Chili powder	56
Cloves, Zanzibar	60
Ginger, Jamaica	44
Mace, fancy Banda	3.90
Pepper:	.....
East Indies	2.55
Mustard flour, fancy	43
No. 1	38
West Indies nutmeg	1.82
Paprika, American,	.....
No. 1	52
Paprika, Spanish,	.....
No. 1	67
Cayenne pepper	63
Red, No. 1	56
White	1.02
Black	75

SAUSAGE CASINGS

(Lcl prices quoted to manufacturers of sausage)

Beef rounds:	(Per set)
Clear, 29/35 mm.	1.25 @ 1.35
Clear, 35/38 mm.	1.25 @ 1.35
Clear, 35/40 mm.	1.10 @ 1.25
Clear, 38/40 mm.	1.25 @ 1.35
Not clear, 40 mm./dn.	75 @ 85
Not clear, 40 mm./up	95 @ 1.05
Beef weasands:	(Each)
No. 1, 24 in./up	13 @ 15
No. 1, 22 in./up	16 @ 18
Beef middles:	(Per set)
Ex. wide, 2 1/4 in./up	3.60 @ 3.85
Spec. wide, 2 1/4 in.	2.65 @ 2.90
Spec. med. 1 1/2 1/4 in.	1.75 @ 2.00
Narrow, 1 1/4 in./dn.	1.15 @ 1.30
Beef bung caps:	(Each)
Clear, 5 in./up	38 @ 43
Clear, 4 1/2 in.	29 @ 34
Clear, 4 1/4 in.	20 @ 22
Clear, 3 1/2 in.	16 @ 19
Beef bladders, salted:	(Each)
7 1/2 inch/up, inflated	21
6 1/2-7 1/2 inch, inflated	12
5 1/2-6 1/2 inch, inflated	12 @ 14
Pork casings:	(Per hank)
29 mm./down	4.45 @ 5.00
29/32 mm.	4.35 @ 5.00
32/35 mm.	3.25 @ 3.35
35/38 mm.	2.60 @ 2.75
38/42 mm.	2.35 @ 2.50
Hog bungs:	(Each)
Sow, 34 inch cut	62 @ 64
Export, 34 in. cut	53 @ 57
Large prime, 34 in.	42 @ 45
Med. prime, 34 in.	29 @ 32
Small prime	16 @ 22
Middles, cap off	70 @ 75
Hog skips	7 @ 10
Hog runners, green	15 @ 20

Sheep casings:	(Per hank)
26/28 mm.	5.35 @ 5.45
24/26 mm.	5.25 @ 5.35
22/24 mm.	4.15 @ 4.25
20/22 mm.	3.65 @ 3.75
18/20 mm.	2.70 @ 2.80
16/18 mm.	1.35 @ 1.45

CURING MATERIALS

Nitrite of soda, in 400-lb. Cwt.	.....
bbls., del. or f.o.b. Chgo	\$11.58
Pure refined gran.	.....
nitrate of soda	5.65
Pure refined powdered nitrate	.....
of soda	8.65
Salt, paper sacked, f.o.b.	.....
Chgo. gran. carlots, ton	30.50
Rock salt in 100-lb.	.....
bags, f.o.b. whse., Chgo	28.50
Sugar:	.....
Raw, 96 basis, f.o.b. N.Y.	6.15
Refined standard cane	.....
gran., del'd, Chgo	9.25
Packers curing sugar, 100-	.....
lb. bags, f.o.b. Reserve,	.....
La., less 2%	8.85
Dextrose, regular:	.....
Cerelose, (carlots, cwt.)	7.41
Ex-warehouse, Chicago	7.56

SEEDS AND HERBS

(Lcl., lb.)	Whole Ground
Caraway seed	30
Cominos seed	43
Mustard seed	48
fancy	23
yellow Amer.	17
Oregano	37
Coriander,	.....
Morocco, No. 1	20
Marjoram, French	54
Sage, Dalmatian,	.....
No. 1	59

FRESH MEATS... Chicago and outside

CHICAGO

May 10, 1960

CARCASS BEEF

Steers, gen. range: (carlots, lb.)	
Prime, 700/800	none qtd.
Choice, 500/600	44
Choice, 600/700	44
Choice, 700/800	43½
Good, 500/600	41
Good, 600/700	41½
Bull	33
Commercial cow	33
Canner-cutter cow	32½ @ 32½

PRIMAL BEEF CUTS

Prime:	
Rounds, all wts.	55 @ 56
Tr. loins, 50/70 (cl) 90	@ 108
Sq. chux, 70/90	39½
Armchux, 80/110	37
Ribs, 25/35 (cl)	72 @ 74
Briskets (cl)	30 @ 30½
Naveis, No. 1	14½ @ 15
Flanks, rough No. 1	14½ @ 15
Choice:	
Hindqtrs, 5/800	53½
Foreqtrs, 5/800	36½
Rounds, 70/90 lbs.	52 @ 52½
Tr. loins, 50/70 lcl.	78 @ 87
Sq. chux, 70/90	39½
Armchux, 80/110	37
Ribs, 25/30 (cl)	60 @ 64
Ribs, 30/35 (cl)	60 @ 62
Briskets (cl)	30 @ 30½
Naveis, No. 1	14½ @ 15
Flanks, rough No. 1	14½ @ 15
Good (all wts.):	
Sq. chucks	38 @ 39
Rounds	50 @ 52
Briskets	29 @ 30
Ribs	53 @ 55
Loins, trim'd.	68 @ 71

COW, BULL TENDERLOINS

C&C grade, fresh (Job lots, lb.)	
Cow, 3 lbs./down	80 @ 85
Cow, 3/4 lbs.	95 @ 100
Cow, 4/5 lbs.	102 @ 107
Cow, 5 lbs./up	116 @ 120
Bull, 5 lbs./up	116 @ 120

CARCASS LAMB

(Lcl., lb.)	
Prime, 30/45 lbs.	46 @ 48
Prime, 45/55 lbs.	44½ @ 47
Prime, 55/65 lbs.	42 @ 45
Choice, 30/45 lbs.	46 @ 48
Choice, 45/55 lbs.	44½ @ 47
Choice, 55/65 lbs.	42 @ 45
Good, all wts.	40 @ 46

PACIFIC COAST WHOLESALE MEAT PRICES

	Los Angeles May 10	San Francisco May 10	No. Portland May 10
FRESH BEEF (Carcass):			
STEER:			
Choice, 5-600 lbs.	\$44.50 @ 47.00	\$47.00 @ 48.00	\$45.00 @ 46.50
Choice, 6-700 lbs.	44.00 @ 46.00	45.00 @ 47.00	44.50 @ 46.00
Good, 5-600 lbs.	42.00 @ 44.00	43.50 @ 44.50	44.00 @ 45.50
Good, 6-700 lbs.	41.00 @ 42.00	42.50 @ 43.50	43.00 @ 44.50
COW:			
Commercial, all wts.	34.00 @ 36.00	35.00 @ 38.00	37.00 @ 39.00
Utility, all wts.	33.00 @ 35.00	31.00 @ 33.00	35.00 @ 37.00
Canner-cutter	30.00 @ 33.00	29.00 @ 31.00	33.00 @ 36.00
Bull, util. & com'l.	37.00 @ 42.00	37.00 @ 39.00	40.00 @ 42.00
FRESH CALF:			
Choice, 200 lbs./down	(Skin-off) 50.00 @ 54.00	(Skin-off) None quoted	(Skin-off) 46.00 @ 54.00
Good, 200 lbs./down	48.00 @ 52.00	46.00 @ 52.00	44.00 @ 52.00
LAMB (Carcass):			
Prime, 45-55 lbs.	(Spring) 45.00 @ 47.00	(Spring) 44.00 @ 47.00	(Spring) 46.00 @ 48.00
Prime, 55-65 lbs.	41.00 @ 43.00	None quoted	None quoted
Choice, 45-55 lbs.	45.00 @ 47.00	44.00 @ 47.00	46.00 @ 48.00
Choice, 55-65 lbs.	42.00 @ 44.00	42.00 @ 44.00	None quoted
Good, all wts.	42.00 @ 44.00	40.00 @ 44.00	44.00 @ 47.00
FRESH PORK: (Carcass)			
135-175 lbs. U.S. No. 1-3	None quoted	(Shipper style) None quoted	(Shipper style) 26.50 @ 28.00
LOINS:			
8-10 lbs.	41.00 @ 45.00	44.00 @ 48.00	45.00 @ 48.00
10-12 lbs.	41.00 @ 45.00	46.00 @ 48.00	45.00 @ 48.00
12-16 lbs.	41.00 @ 45.00	44.00 @ 46.00	45.00 @ 48.00
PICNICS:			
4-8 lbs.	(Smoked) 29.00 @ 35.00	(Smoked) 30.00 @ 34.00	(Smoked) 31.00 @ 35.00
HAMS:			
12-16 lbs.	44.00 @ 54.00	48.00 @ 53.00	49.00 @ 55.00
16-18 lbs.	43.00 @ 53.00	46.00 @ 51.00	48.00 @ 53.00

NEW YORK

May 10, 1960

CARCASS BEEF AND CUTS

Prime steer:	(cl., lb.)
Carcass, 6/700	none qtd.
Carcass, 7/800	none qtd.
Carcass, 8/900	none qtd.
Hinds, 6/700	.61 @ .66
Hinds, 7/800	.61 @ .67
Rounds, cut across,	
flank off	.52 @ .58
Rds., dia. bone, f.o.	.53 @ .59
Short loins, untrim.	104 @ 116
Short loins, trim	.127 @ .152
Flanks	.17 @ .20
Ribs	.67 @ .72
Arm chucks	.39 @ .44
Briskets	.36 @ .41
Plates	.12½ @ .17
Choice steer:	
Carcass, 6/700	.46½ @ 48½
Carcass, 7/800	.45½ @ 47½
Carcass, 8/900	.45 @ 46
Hinds, 6/700	.55 @ .60
Hinds, 7/800	.54 @ .59
Rounds, cut across,	
flank off	.51½ @ .57
Rds., dia. bone, f.o.	52½ @ 58
Short loins, untrim.	.70 @ .82
Short loins, trim.	.92 @ 1.06
Flanks	.16½ @ .20
Ribs	.58 @ .64
Arm chucks	.38 @ .43
Briskets	.35 @ .41
Plates	.12 @ .16
Good steer:	
Carcass, 5/600	.43½ @ 45½
Carcass, 6/700	.43 @ .45
Hinds, 6/700	.51½ @ .55
Hinds, 7/800	.51 @ .54
Rounds, cut across,	
flank off	.51 @ .56
Rds., dia. bone, f.o.	.52 @ .57
Short loins, untrim.	.66 @ .70
Short loins, trim.	.86 @ .84
Flanks	.16½ @ .20
Ribs	.54 @ .58
Arm chucks	.37 @ .42

FANCY MEATS

Veal breads, 6/12-oz.	1.41
12-oz./up	1.41
Beef livers, selected	38
Beef kidneys	21
Oxtails, ¾-lb., frozen	19

VEAL SKIN-OFF

(Carcass prices, lcl., lb.)	
Prime, 90/120	.56 @ 62
Prime, 120/150	.54 @ 60
Choice, 90/120	.47 @ 54
Choice, 120/150	.46 @ 52
Good, 90/120	.45 @ 48
Good, 120/150	.43 @ 46
Choice calf, all wts.	.42 @ 47
Good calf, all wts.	.41 @ 44

CARCASS LAMB

(Lcl., lb.)	
Prime, 35/45	.47 @ 50
Prime, 45/55	.46 @ 50
Prime, 55/65	.43 @ 46
Choice, 35/45	.47 @ 50
Choice, 45/55	.44 @ 48
Choice, 55/65	.43 @ 45
Good, 35/45	.42 @ 44
Good, 45/55	.40 @ 43
Good, 55/65	.39 @ 41
(Carcots, lb.)	
Choice, 35/45	.46 @ 48
Choice, 45/55	.44 @ 45½
Choice, 55/65	.42 @ 43

CARCASS BEEF

(Carcots, lb.)	
Steer, choice, 6/700	.45½ @ 46
Steer, choice, 7/800	.45½ @ 45½
Steer, choice, 8/900	.45 @ 45½
Steer, good, 5/600	.43 @ 43½
Steer, good, 6/700	.42½ @ 43½
Steer, good, 7/800	.42½ @ 43

Phila., N. Y. Fresh Pork

May 10, 1960

PRIME STEER:	(lcl. lb.)
Carcass, 5/700	.50 @ 51½
Carcass, 7/900	.49½ @ 51
Rounds, flank off	.56 @ 59
Loins, full, untr.	.68 @ 71
Loins, full, trim	none qtd.
Ribs, 7-bone	.68 @ 73
Armchux, 5-bone	.40 @ 41
Briskets, 5-bone	.32 @ 36
CHOICE STEER:	
Carcass, 5/700	.46½ @ 48
Carcass, 7/900	.46 @ 47½
Rounds, flank off	.54 @ 56
Loins, full, untr.	.56 @ 58
Loins, full, trim	.68 @ 72
Ribs, 7-bone	.61 @ 65
Armchux, 5-bone	.41 @ 44
Briskets, 5-bone	.32 @ 36
GOOD STEER:	
Carcass, 5/700	.43½ @ 45½
Carcass, 7/900	.43 @ 45
Rounds, flank off	.52 @ 55
Loins, full, untr.	.48 @ 53
Loins, full, trim	.62 @ 66
Ribs, 7-bone	.54 @ 60
Armchux, 5-bone	.38 @ 40
Briskets, 5-bone	.32 @ 36
COW CARCASS:	
Comm'l. 500/700	.34½ @ 36½
Utility 350/700	.33½ @ 35½
Can-cut 350/700	.33 @ 35
VEAL CARC.: Choice	Good
60/90 lbs.	.49 @ 51
90/120 lbs.	.50 @ 52
120/150 lbs.	.50 @ 52
LAMB, Spr.: Prime	Choice
35/45 lbs.	.51 @ 53
45/55 lbs.	.50 @ 52
55/65 lbs.	.48 @ 50

PHILA. FRESH MEATS

PHILADELPHIA: (local, lcl. lb.)	
Reg. loins, 8/12	.43 @ 46
Reg. loins, 12/16	.41 @ 44
Boston Butts, 4/8	.30 @ 34
Spareribs, sheet	.39 @ 42
Hams, sknd, 10/12	.45 @ 47
Hams, sknd, 12/14	.45 @ 47
Picnics, S.S. 4/8	.27 @ 30
Picnics, S.S. 6/8	.26 @ 28
Bellies, 10/14	.26 @ 28
NEW YORK: (Box lots, lb.)	
Reg. loins, 8/12	.42 @ 48
Reg. loins, 12/16	.41 @ 47
Hams, sknd, 12/16	.44 @ 49
Boston butts, 4/8	.30 @ 37
Regular picnics, 4/8	.27 @ 33
Spareribs, 3/down	.38 @ 44

CHGO. FRESH PORK AND PORK PRODUCTS

May 10, 1960	
Hams, skinned, 10/12	44
Hams, skinned, 12/14	44
Hams, skinned, 14/16	42
Picnics, 4/8 lbs.	24
Picnics, 6/8 lbs.	23½
Pork loins, boneless	63
Shoulders, 16/dn.	26½
(Job lots, lb.)	
Pork livers	11 @ 11½
Tenderloins, fresh, 10's	72 @ 75
Neck bones, bbls.	8½ @ 9
Feet, s.c., bbls.	7½ @ 8

OMAHA, DENVER MEATS

(Carcass carlots, cwt.)	
Omaha, May 11, 1960	
Choice steer, 6/700	\$42.75 @ 43.25
Choice steer, 7/800	42.75 @ 43.25
Choice steer, 8/900	42.25 @ 42.50
Good steer, 6/800	40.50 @ 41.25
Choice heifer, 5/700	42.50
Good heifer, 5/700	39.50
Cow, C-C & util.	31.00 @ 31.50
Denver, May 11, 1960	
Prime steer, 6/900	46.00
Choice steer, 6/700	42.50 @ 43.00
Choice steer, 7/800	42.50 @ 43.00
Choice steer, 8/900	42.50
Good steer, 6/800	39.00 @ 41.00
Choice heifer, 5/600	42.75 @ 43.25
Choice heifer, 6/700	42.00 @ 42.50

CHGO. PORK SAUSAGE MATERIAL—FRESH

Pork trimmings: (Job lots)	
40% lean, barrels	17 @ 17½
50% lean, barrels	19
80% lean, barrels	34
95% lean, barrels	41
Pork head meat	30
Pork cheek meat	
trimmed, barrels	35
Pork cheek meat, untrimmed	32

PORK AND LARD ... Chicago and outside

CHICAGO PROVISION MARKETS

From the National Provisioner Daily Market Service

CASH PRICES

(Carlot basis, Chicago price zone, May 11, 1960)

SKINNED HAMS			BELLIES		
F.F.A. or fresh	Frozen		F.F.A. or fresh	Frozen	
42 1/2a	10/12	42 1/2n	28n	6/8	28n
42 1/2a	12/14	42	28 1/2	8/10	28 1/2
40 1/2a	14/16	40 1/2	27 1/2	10/12	27 1/2
39 1/2a	16/18	39 1/2	24 1/2a	12/14	24 1/2n
38 1/2a	18/20	38 1/2n	24	14/16	24
38	20/22	38	23 1/2	16/18	23 1/2
37	22/24	37	23 1/2	18/20	23 1/2
37	24/26	37	D.S. BRANDED BELLIES (CURED)		
35 1/2	25/30	35 1/2	n. q.	20/25	21n
34	25 up, 2s in	34	n. q.	25/30	20 1/2n
			G.A. froz., fresh	D.S. Clear	
			18 1/2b	20/25	19 1/2n
			18 1/2	25/30	19n
			15	30/35	17n
			12	35/40	17n
				40/50	14@16

PICNICS		
F.F.A. or fresh	Frozen	
23	4/6	23n
23 1/2	6/8	22 1/2
23 1/2	8/10	22 1/2
22 1/2n	10/12	22 1/2n
22 1/2	f.f.a. 8 up 2's in	22 1/2
22 1/2	fresh 8 up 2's in	n.q.

FRESH PORK CUTS		
Job Lot	Car Lot	
41 1/2 @ 42..	Loins, 12/dn	40
39	Loins, 12/16	37 1/2 @ 38
33	Loins, 16/20	33b
30	Loins, 20/up	28
30	Butts, 4/8	29
27 1/2	Butts, 8/12	27n
27 1/2	Butts, 8/up	27n
30 1/2 @ 37..	Ribs, 3/dn	34 1/2 @ 35
30	Ribs, 3/5	28
28	Ribs, 5/up	22

FAT BACKS		
Frozen or fresh	Cured	
7n	6/8	7
7n	8/10	7 1/2
8n	10/12	9 1/4
8n	12/14	10
9n	14/16	10 1/4
11n	16/18	12 1/2
11n	18/20	12 1/2
11n	20/25	12 1/2

OTHER CELLAR CUTS		
Frozen or fresh	Cured	
14	Sq. Jowls, boxed	n.q.
10	Jowl Butts, loose	10n
10 1/2	Jowl Butts, boxed	n.q.

LARD FUTURES PRICES

(Drum contract basis)
FRIDAY, MAY 6, 1960

	Open	High	Low	Close
May	9.57	9.62	9.57	9.60b
July	9.97	10.00	9.95	9.97a
Sept.	10.37	10.40	10.35	10.37a
Oct.	10.35	10.35	10.35	10.35
Nov.				10.30n

Sales: 1,600,000 lbs.
Open interest at close, Thurs., May 5: 82; July, 248; Sept., 354; Oct., 93; and Nov., 35 lots.

MONDAY, MAY 9, 1960

	Open	High	Low	Close
May	10.00	10.00	9.95	9.97a
July	10.37	10.37	10.32	10.37a
Oct.	10.35	10.37	10.35	10.37a
Nov.				10.30a

Sales: 1,040,000 lbs.
Open interest at close, Fri., May 6: 79; July, 248; Sept., 364; Oct., 94; and Nov., 35 lots.

TUESDAY, MAY 10, 1960

	Open	High	Low	Close
May	9.65	9.65	9.62	9.62a
July	9.97	10.00	9.95	9.95a
Sept.	10.35	10.37	10.27	10.27b
Oct.				10.30a
Nov.	10.25	10.25	10.25	10.25

Sales: 1,080,000 lbs.
Open interest at close, Mon., May 9: 79; July, 247; Sept., 374; Oct., 100; and Nov., 35 lots.

WEDNESDAY, MAY 11, 1960

	Open	High	Low	Close
May	9.55	9.60	9.55	9.60
July	9.90	9.95	9.87	9.90
Sept.	10.27	10.32	10.25	10.27
Oct.	10.30	10.30	10.30	10.30
Nov.				10.25n

Sales: 1,320,000 lbs.
Open interest at close, Tues., May 10: 79; July, 252; Sept., 373; Oct., 100; and Nov., 36 lots.

THURSDAY, MAY 12, 1960

	Open	High	Low	Close
May	9.65	9.65	9.65	9.65
July	9.92	10.00	9.92	10.00a
Sept.	10.30	10.37	10.30	10.37a
Oct.	10.37	10.40	10.37	10.40b
Nov.	10.35	10.42	10.35	10.42

Sales: 1,400,000 lbs.
Open interest at close, Wed., May 11: 77; July, 251; Sept., 378; Oct., 101; and Nov. 36 lots.

LARD FUTURES PRICES

(Loose contract basis)
FRIDAY, MAY 6, 1960

	Open	High	Low	Close
May				
July				8.75n
Sept.				9.15n
Oct.				

Sales: none.
Open interest at close, Thurs., May 5: July, 2; and Sept., 64 lots.

MONDAY, MAY 9, 1960

	Open	High	Low	Close
May				
July				8.75n
Sept.				9.15a
Oct.				

Sales: none.
Open interest at close, Fri., May 6: July, 2; and Sept., 64 lots.

TUESDAY, MAY 10, 1960

	Open	High	Low	Close
May				
July				8.75n
Sept.				9.15a

Sales: none.
Open interest at close, Mon., May 9: July, 2; and Sept., 64 lots.

WEDNESDAY, MAY 11, 1960

	Open	High	Low	Close
May				
July				8.75n
Sept.	9.15	9.15	9.15	9.15a

Sales: none.
Open interest at close, Tues., May 10: July, 2; and Sept., 64 lots.

THURSDAY, MAY 12, 1960

	Open	High	Low	Close
May				
July				8.75n
Sept.				9.15a

Sales: none.
Open interest at close, Wed., May 11: July, 2; and Sept., 64 lots.

SLICED BACON PRODUCTION

Sliced bacon production for the week ended April 16 amounted to 17,590,859 lbs., according to the U.S. Department of Agriculture.

WHITTLE DOWN MORE ON MINUS MARGINS

(Chicago costs, credits and realizations for Monday and Tuesday)

Substantial markups on lean cuts accounted for the advancements in some cut-out margins. Shifts in prices tended largely to favor the two heavier classes of porkers, the minus positions of which were whittled down some more. The sharply higher live costs on light-weights held those margins steady.

	-180-230 lbs.-		-220-240 lbs.-		-240-270 lbs.-	
	Value		Value		Value	
	per cwt. alive	per cwt. fin. yield	per cwt. alive	per cwt. fin. yield	per cwt. alive	per cwt. fin. yield
Lean cuts	\$11.80	\$16.99	\$11.24	\$15.78	\$10.45	\$14.81
Fat cuts, lard	4.66	6.70	4.67	6.62	4.14	5.75
Ribs, trimmings, etc.	1.91	2.75	1.76	2.47	1.63	2.28
Cost of hogs	16.35		16.12		15.36	
Condemnation loss	.08		.08		.08	
Handling, overhead	2.31		2.10		1.89	
TOTAL COST	18.74	26.96	18.30	25.77	17.33	24.43
TOTAL VALUE	18.37	26.44	17.67	24.87	16.22	22.84
Cutting margin	-.37	-.52	-.63	-.90	-1.11	-1.59
Margin last week	-.37	-.52	-.69	-.96	-1.20	-1.68

PACIFIC COAST WHOLESALE LARD PRICES

	Los Angeles	San Francisco	No. Portland
	May 10	May 10	May 10
1-lb. cartons	13.50@16.00	16.50@17.50	13.00@15.50
50-lb. cartons & cans	12.50@15.00	16.00@17.00	None quoted
Tierces	11.50@12.75	15.00@16.00	10.00@14.00

PACKERS' WHOLESALE

LARD PRICES

Wednesday, May 11, 1960	
Refined lard, drums, f.o.b. Chicago	\$12.25
Refined lard, 50-lb. fiber cubes, f.o.b. Chicago	11.75
Kettle rendered, 50-lb. tins, f.o.b. Chicago	13.75
Leaf, kettle rendered, drums, f.o.b. Chicago	13.25
Lard flakes	13.00
Neutral, drums, f.o.b. Chicago	14.25
Standard shortening, N. & S. (del)	17.25
Hydrogenated shortening, North & South, drums	17.50

WEEK'S LARD PRICES

	P.S. or D.R. cash tierces (Bd. Trade)	Dry rend. loose (Open)	Ref. in 50-lb. tins (Open)
May 6	9.60n	8.50	11.00n
May 9	9.60n	8.50	11.00n
May 10	9.62n	8.50	11.00n
May 11	9.60n	8.50	11.00n
May 12	9.65n	8.37	10.75n

Note: add 1/4¢ to all prices ending in 2 or 7.
n-nominal, a-asked, b-bid

HOG-CORN RATIOS COMPARED

The hog-corn ratio based on barrows and gilts at Chicago for the week ended May 7, 1960 was 13.2, the U. S. Department of Agriculture has reported. This ratio compared with the 13.3 ratio for the preceding week and 12.8 a year ago. These ratios were calculated on the basis of No. 3 yellow corn selling at \$1.200, \$1.202 and \$1.269 per bu. during the three periods, respectively.

VEGETABLE OILS

Wednesday, May 11, 1960	
Crude cottonseed oil, f.o.b. Valley	10 1/4
Southeast	10 1/4n
Texas	9 3/4 @ 9 3/4
Corn oil in tanks, f.o.b. mills	12 3/4 @ 12 3/4
Soybean oil, f.o.b. Decatur	8.10 @ 8.12
Coconut oil, f.o.b. Pacific Coast	14 1/4n
Peanut oil, f.o.b. mills	15 1/4
Cottonseed foots: Midwest, West Coast	13%
East	13%
Soybean foots, midwest	14%

OLEOMARGARINE

Wednesday, May 11, 1960	
White domestic vegetable, 30-lb. cartons	22 1/4
Yellow quarters, 30-lb. cartons	24 1/4
Milk churned pastry, 750-lb. tins, 30's	23 1/2
Water churned pastry, 750-lb. tins, 30's	22 1/4
Bakers, steel drums, tons	16 1/4

OLEO OILS

Prime oleo stearine, bags	10 1/4
Extra oleo oil (drums)	15 1/4
Prime oleo oil (drums)	14 1/2 @ 14 1/2

N. Y. COTTONSEED

OIL CLOSINGS

Closing cottonseed oil futures in New York were as follows:
May 6-May, 12.00b-10a; July, 12.20-21; Sept., 12.08; Oct., 11.88b-90a; Dec., 11.80b-84a; Mar., 11.85b-85a; May, 11.87b; and July, 11.85b.
May 9-May, 11.97b-12.02a; July, 12.18b-20a; Sept., 12.05; Oct., 11.88; Dec., 11.81b-83a; Mar., 11.86; May, 11.87b-90a; and July, 11.86b-12.00a.
May 10-May, 12.02; July, 12.14; Sept., 12.03-02; Oct., 11.85b-80a; Dec., 11.85-81; Mar., 11.87; May, 11.88b; and July, 11.90b.
May 11-May, 11.94b-97a; July, 12.09-08; Sept., 12.00; Oct., 11.82b-85a; Dec., 11.78; Mar., 11.84b-90a; May, 11.86b-90a; and July, 11.86b.
May 12-May, 9.65n 8.37 10.75n
May 12-May, 12.07b-10a; July, 12.16; Sept., 12.09-10; Oct., 11.87b-88a; Dec., 11.85-84; Mar., 11.89b-93a; May 11.91b-85a; and July, 11.85b.

BY-PRODUCTS...FATS AND OILS

BY-PRODUCTS MARKET

•F.O.B. Chicago, unless otherwise indicated)
Wednesday, May 11, 1960

BLOOD

Unground, per unit of ammonia, bulk 4.50n

DIGESTER FEED TANKAGE MATERIALS

Wet rendered, unground, loose
Low test 5.00n
Med. test 4.75n
High test 4.50n

PACKINGHOUSE FEEDS

50% meat, bone scraps, bagged 82.50
50% meat, bone scraps, bulk 67.50
60% digester tankage, bagged 82.50
60% digester tankage, bulk 67.50
80% blood meal, bagged 110.00@ 125.00
Steam bone meal, 50-lb. bags (specially prepared) 97.50
60% steam bone meal, bagged 80.00

FERTILIZER MATERIALS

Feather tankage, ground, per unit ammonia (85% prot.) 4.75
Hoof meal, per unit of ammonia 16.75

DRY RENDERED TANKAGE

Low test, per unit prot. 1.30n
Medium test, per unit prot. 1.20n
High test, per unit prot. 1.05@ 1.10n

GELATINE AND GLUE STOCKS

Bone stock, (gelatine), ton 14.50
Cattle jaws, feet (non-gel), ton 1.25@ 3.25
Trim bone, ton 3.25@ 7.50
Pigskins (gelatine), lb. 6 3/4n
Pigskins (rendering) piece 7 1/2@ 12 1/2

ANIMAL HAIR

Winter coil, dried, c.a.f. midwest, ton 80.00@ 85.00
Winter coil, dried, midwest, ton 70.00@ 75.00
Cattle switches piece 2@ 3 1/4
Summer processed (Apr.-Oct.) gray, lb. 13@ 14
*Del. midwest, *del. east, n-nom., a-asked.

TALLOW and GREASES

Wednesday, May 11, 1960

The inedible tallow and grease market was in a firm position late last week, and a fair volume of trading transpired. Bleachable fancy tallow sold at 5 1/2c, prime tallow at 5 1/4c, special tallow at 5c and yellow grease at 4 3/4c, all c.a.f. Chicago. Choice white grease, all hog, was bid at 6 5/8@6 3/4c, c.a.f. New York, with the asking price at 6 7/8c. Bleachable fancy tallow met buying interest at 6@6 1/8c, also New York.

Original fancy tallow was bid at 5 3/4c, c.a.f. Chicago. Several tanks of edible tallow changed hands at 8 1/4c, c.a.f. Chicago. Edible tallow was offered at 7 3/4c, f.o.b. favorable River point, but it was bid 1/8c lower. Most trade talk on an f.o.b. Denver basis was at 7 1/4@7 3/8c.

As the new week got under way, further inquiry was apparent on choice white grease, all hog, at 6 3/4c, c.a.f. East, and at 5 7/8c, c.a.f. Chicago. Continued buying interest for inedible product was apparent at last trading levels, c.a.f. Chicago, but

most sellers asked 1/8@1/4c higher. Some special tallow sold at 5c and yellow grease at 4 3/4c, c.a.f. Chicago. Special tallow was bid at 5 5/8c, and yellow grease at 5 1/2c, c.a.f. New York price zone.

It was reported that bleachable fancy tallow was bid at 5 7/8@6c, c.a.f. Avondale, La., and price depended on quality of stock. A couple of tanks of bleachable fancy tallow sold at 5 1/2c, delivered Chicago. Some edible tallow was reported to have sold at 7 1/4c, f.o.b. Denver, and a couple more tanks traded at 8 1/4c, c.a.f. Chicago.

House grease sold at 4 1/2c, c.a.f. Chicago. Original fancy tallow was bid at 5 3/4c, also c.a.f. Chicago.

Additional tanks of bleachable fancy tallow sold at midweek at 5 1/2c, c.a.f. Chicago. Active inquiry was still in the market on most other items on a basis of c.a.f. Chicago. However, sellers persistently asked 1/8@1/4c higher than last trading prices. Choice white grease, all hog, sold at 6 3/4c, c.a.f. Avondale, and at 6 7/8c, c.a.f. New York. It was also reported that choice white grease,

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all hog, was sought at 6c, c.a.f. Chicago area.

Special tallow was bid at 5½c, c.a.f. New York, and some indications were also in the market of ½c higher on low acid stock. Yellow grease was bid at 5½c@5½c, New York, and the outside price was also on low acid material. Edible tallow was bid at 8¼c, c.a.f. Chicago, but it was held at 8½c. Edible tallow was offered at 7¾c, f.o.b. River, and indicated bid at 7¾c. Two tanks sold later at 7¾c, f.o.b. River.

TALLOW: Wednesday's quotations: edible tallow, 8¼c, Chicago basis and 7¾c, f.o.b. River; original fancy tallow, 5¾c; bleachable fancy tallow, 5½c; prime tallow, 5¼c; special tallow, 5c; No. 1 tallow, 4¾c; and No. 2 tallow, 4¼c.

GREASES: Wednesday's quotations: choice white grease, all hog, 6c; B-white grease, 5c; yellow grease, 4¾c; and house grease, 4½c.

EASTERN BY-PRODUCTS

New York, May 11, 1960
Dried blood was quoted today at \$4.25 per unit of ammonia. Low test wet rendered tankage was listed at \$4.50 per unit of ammonia and dry rendered tankage was priced at \$1.20 per protein unit.

Japan Would Hike Lard Duty; Imports Of U. S. Hog Fat Rise

The recently reported placing of lard by Japan on the automatic approval list has resulted in the introduction of legislation to raise the duty on the commodity, the Foreign Agricultural Service has revealed. The move was intended to encourage imports of inedible white hog grease for refining into lard and oleomargarine. Both lard and hog grease are now subject to a 5 per cent duty in Japan.

Under the proposed legislation, the duty on lard would be raised to 15 yen per kilo (about 20 per cent ad valorem), but it was added that there would be no change in the duty on grease. Since the present lard duty is bound under the Agreement on Tariffs and Trade (GATT), the proposed tariff will have to be renegotiated.

Japan's imports of hog grease rose sharply in 1959. It is expected that Japan will import over 30,000,000 lbs. of choice white hog grease this year, most of which will most likely come from the United States. U. S. shipments of inedible tallow to Japan last year reached 254,000,000 lbs., up from 215,000,000 lbs. shipped the previous year.

CHICAGO HIDES

Wednesday, May 11, 1960

BIG PACKER HIDES: Packers had little difficulty in disposing of most of their offerings last week at ½c advances. In addition to the good movement of heavy hides, St. Paul light native cows traded at 19½c for April-forward take-off. Another 7,500 heavy average River light native cows sold at 20½c, April-forward stock and some light average Rivers sold at 22c. Southwestern 30/45-lb. light native cows brought a premium price of 30c.

The market was quiet at the start of the new week although a steady to strong undertone was observed. On Tuesday, the only trading reported involved a car of Indianapolis light native steers at 23c and a car of light native cows at 21c.

At midweek, about 50,000 hides sold 1c above last sales, or ½c higher than previous day's bids. Sales involved heavy native steers at 14½c River, 15c low freight point; butt-brands at 13c River and low freight point; heavy native cows at 17c River and 17½c low freight, point and Northern and River branded cows at 16c, also a few low freight stock at 16c. Colorados were available at 12c, ½c over last sales. Light and exlight native steers sold off the River at prices of 22c and 24c, respectively.

SMALL PACKER AND COUNTRY HIDES: The Midwestern small packer hide market assumed a stronger undertone following the recent price advances in the major packer market. The 50/52-lb. averages were pegged at 17@17½c nominal at midweek, while the 60/62's were in fair demand at 14@14½c. Locker-butcher 50/52's also were stronger at 14@14½c. Straight cars of 50/52-lb. renderers were reported available at 13@13½c and No. 3 hides, 50/52 average, were nominal at 11@11½c. Horsehides held about steady. Good to choice Northern's were pegged at 9.50@10.50 and ordinary lots at 7.50@8.50.

CALFSKINS AND KIPSKINS: Last confirmed trading in big packer light calf was at 55c. Heavy calf was last reported sold from Northern points at 56½c. River kipskins were last reported at 45c. Overweights were offered at 42½c, with last confirmed sales at 41c. Small packer allweight calf was steady at 43@45c, as were allweight kips at 35@37c. Country calf was quoted at 28@30c and allweight kips at 25@27c nominal. Sales of regular slunks were reported late last week at 150,

a decline of 35c from previous sales.

SHEEPSKINS: Northern-River No. 1 shearlings were largely steady at 1.80@2.25, with some Southwesterns held up to 2.35. No. 2's from Northern and River points were pegged at 1.50@1.65 and Southwesterns at 1.65@1.70. A little action on River No. 3's was heard at .65@.80. Northern-River fall clips were quoted at 2.50@2.75, with a few Southwesterns reported sold at 3.00@3.10. Southwestern spring lambs were listed at 2.00@2.25 each. Full wool dry pelts were nominal at .23. Pickled lambskins fell to 8.50 and sheep to 10.00@10.50, per dozen.

CHICAGO HIDE QUOTATIONS

PACKER HIDES		Cor. date
Wednesday, May 11, 1960		1959
Lgt. native steers	22 @ 23	26
Hvy. nat. steers	14½ @ 15	20 @ 20½
Ex. lgt. nat. steers	24	28
Butt-brand. steers	13	18½
Colorado steers	12b	17½
Hvy. Texas steers	13n	19n
Light Texas steers	20n	24n
Ex. lgt. Texas steers	22n	27n
Heavy native cows	17 @ 17½	23½ @ 24
Light nat. cows	20 @ 21n	25 @ 26
Branded cows	16 @ 16½	22½ @ 24
Native bulls	11½ @ 12n	16½ @ 17n
Branded bulls	10½ @ 11n	15½ @ 16n
Calfskins:		
Northern, 10/15 lbs.	56½n	87½n
10 lbs./down	55n	90n
Kips, Northern native, 15/25 lbs.	45n	62½n

SMALL PACKER HIDES

STEERS AND COWS:		
60/62-lb. avg.	14 @ 14½n	17 @ 18n
50/52-lb. avg.	17 @ 17½n	21 @ 22n

SMALL PACKER SKINS

Calfskins, all wts.	43 @ 45n	65 @ 67n
Kipskins, all wts.	35 @ 37n	45 @ 47n

SHEEPSKINS

Packer shearlings:		
No. 1	1.80 @ 2.25	1.50 @ 1.75
No. 2	1.50 @ 1.65	.75 @ .95
Dry Pelts	23n	.19 @ .20
Horsehides, untrim.	10.00 @ 10.50n	10.75 @ 11.00n
Horsehides, trim.	9.50 @ 10.00n	10.00 @ 10.50n

N. Y. HIDE FUTURES

Friday, May 6, 1960				
	Open	High	Low	Close
July	18.20b	18.50	18.26	18.50
Oct.	17.82	18.10	17.82	18.10
Jan.	17.30b	17.70	17.70	17.65b-.70a
Apr.	16.85b	17.40	17.40	17.30b-.40a
July	16.25b	.....	.....	16.50n
Sales: 25 lots.				
Monday, May 9, 1960				
July	18.61	18.85	18.56	18.75b-.80a
Oct.	18.27	18.43	18.27	18.35
Jan.	17.65b	.....	.....	17.80b-18.05a
Apr.	17.25b	.....	.....	17.55b-.80a
July	16.60b	.....	.....	16.75b
Sales: 55 lots.				
Tuesday, May 10, 1960				
July	18.85	18.85	18.70	18.70
Oct.	18.36b	18.46	18.30	18.30
Jan.	17.85b	.....	.....	17.80b-18.00a
Apr.	17.60a	.....	.....	17.40b-.70a
July	16.50b	.....	.....	16.50n
Sales: 28 lots.				
Wednesday, May 11, 1960				
July	18.60b	18.80	18.25	18.35b-.45a
Oct.	18.20b	18.35	17.73	17.89
Jan.	17.80b	.....	.....	17.30b-.70a
Apr.	17.35b	.....	.....	17.00b-.40a
July	16.50b	.....	.....	16.25b
Sales: 28 lots.				
Thursday, May 12, 1960				
July	18.40b	18.50	18.30	18.45b-.54a
Oct.	18.00b	18.09	17.95	18.00b-.12a
Jan.	17.30b	.....	.....	17.60b-.80a
Apr.	17.00b	.....	.....	17.20b-.40a
July	16.25b	.....	.....	16.30b-
Sales: 19 lots.				

LIVESTOCK MARKETS... Weekly Review

World Bovine Population Passes Billion Mark First Time In History; Gains Last Year Modest

World cattle numbers, continuing a moderate upswing last year, for the first time in history passed the billion head mark and reached 1,007,665,000 head, the Foreign Agricultural Service has revealed. The bovine population rose in nearly all major areas, but modestly. Numbers increased in North and South America, Europe and Asia, but were down in Oceania and Africa. A year ago the world cattle count was 990,240,000 head.

The immense expanse of Asia contained the largest number—381,710,000 head at the close of 1959, a gain from 379,730,000 a year earlier. South America reported a cattle population of 158,290,000 head last year, up from 154,250,000 a year earlier. Cattle numbers rose to 147,-770,000 head in North America from 140,850,000 a year earlier. The cattle population in Europe was placed at 80,070,000 head, up from 78,180,000 the year before.

World Swine Population Last Year In Slight Gain Over 1958 Count; Largest Number In Asia

Hog numbers increased slightly in 1959 and at the close of the year totaled 482,300,000 head, according to the Foreign Agricultural Service. Up from 461,100,000 head in 1958, the increase last year represented a slowdown in the post-war world hog population build-up. However, all major hog regions showed gains over the year before.

The world's largest hog producing area is Asia, where outside of the count for the USSR, the number was 178,-300,000 head. This represented about an 11,000,000-head gain over the year before. The number in Europe at 104,250,000 head was up from 100,900,000 at the close of 1958. The hog population in North America numbered 58,690,000 at the close of 1959 for a small increase from 57,670,000 head a year earlier.

STOCKER-FEEDER MOVEMENT OF CATTLE, SHEEP

Stocker and feeder cattle and sheep received in several north central states in March, 1959-60, as reported by the U. S. Department of Agriculture:

State	CATTLE AND CALVES		Direct		Totals	
	P.S. Yards	March	March	March	January-March	1960
Ohio	3,452	3,431	1,127	3,025	14,254	19,790
Indiana	10,632	7,072	8,684	9,605	36,962	60,959
Illinois	20,904	20,520	32,301	39,894	157,706	168,971
Michigan	1,690	2,069	592	1,605	6,999	11,037
Minnesota	17,664	14,410	21,717	20,756	119,946	130,969
Iowa	52,558	59,300	74,785	63,379	400,557	377,748
S. Dakota	7,465	9,033	9,751	4,836	49,381	38,078
Nebraska	31,271	20,181	48,258	29,741	229,637	148,990
Totals	145,636	136,016	197,215	172,841	1,015,842	956,542

State	SHEEP AND LAMBS		Direct		Totals	
	P.S. Yards	March	March	March	January-March	1960
Ohio	612	473	1,830	762	4,913	3,776
Indiana	3,070	917	730	780	11,709	5,500
Illinois	3,784	1,064	8,120	12,488	37,354	52,808
Michigan	1,059	766	252	3,849	5,001	5,001
Minnesota	10,006	13,879	13,794	14,512	82,331	96,947
Iowa	5,425	16,585	36,012	62,111	192,906	208,584
S. Dakota	7,378	1,916	2,207	10,903	33,837	40,214
Nebraska	19,189	9,075	6,534	12,307	68,315	66,602
Totals	50,523	44,775	69,327	114,115	435,214	479,432

TRUCKED-IN LIVESTOCK RECEIPTS

Trucked-in receipts of livestock at 58 markets in Mar. 1960-59 were reported by the USDA as follows:

	Number of head		Per cent of total	
	Mar. 1960	Mar. 1959	1960	1959
Cattle	1,367,157	1,384,563	92.0	90.3
Calves	201,870	199,502	93.1	90.6
Hogs	2,566,303	2,629,816	92.2	90.7
Sheep and lambs	608,007	696,800	70.9	69.1

LIVESTOCK PRICES AT LEADING MARKETS

Livestock prices at five western markets on Tuesday, May 10 were reported by the Agricultural Marketing Service, Livestock Division, as follows:

	N.Y. Yds.	Chicago	St. Louis City	Omaha	St. Paul
HOGS:					
BARROWS & GILTS:					
U.S. No. 1:					
180-200		\$16.25-16.65			\$16.00-17.25
200-220		16.50-16.65		\$16.25-16.75	17.00-17.25
220-240		15.85-16.65		16.25-16.75	17.00-17.25
U.S. No. 2:					
180-200			\$15.75-16.40		
200-220			16.25-16.50		16.75-17.00
220-240					16.75-17.00
240-270			15.25-16.00		
U.S. No. 3:					
200-220	\$15.75-16.25	15.75-16.00			16.25-16.50
220-240	15.50-16.25	15.35-16.00			16.00-16.25
240-270	15.25-15.75	14.85-15.50	15.25-15.75		15.50-16.00
270-300	14.75-15.50	14.50-15.00	14.50-15.00		15.00-15.50
U.S. No. 1-2:					
180-200	16.25-16.50	16.25-16.65	15.75-16.50	15.50-16.50	15.75-17.00
200-220	16.25-16.50	16.25-16.65	16.25-16.50	16.25-16.75	16.75-17.00
220-240	16.25-16.50	15.75-16.65	16.25-16.50	16.25-16.75	16.75-17.00
U.S. No. 2-3:					
200-220	15.75-16.25	15.85-16.15	16.00-16.25	15.75-16.25	16.25-16.50
220-240	15.50-16.25	15.50-16.15	16.00-16.25	15.75-16.25	16.25-16.50
240-270	15.25-16.00	15.00-15.60	15.25-16.00	15.25-16.00	15.50-16.25
270-300	14.75-15.50	14.75-15.25	14.50-15.25	14.75-15.50	15.00-15.50
U.S. No. 1-2-3:					
180-200	15.75-16.35	16.00-16.25	15.75-16.35	15.00-16.50	15.75-16.50
200-220	16.00-16.35	16.00-16.25	16.00-16.35	16.00-16.50	16.25-16.50
220-240	15.75-16.35	15.50-16.25	16.00-16.35	16.00-16.50	16.25-16.50
240-270	15.25-16.00	15.00-15.75	15.50-16.00	15.25-16.25	15.50-16.25
SOWS:					
U.S. No. 1-2-3:					
180-270	14.25-14.50		14.00-14.50		
270-330	14.00-14.50		13.50-14.00	14.00-14.50	14.50-14.75
330-400	13.25-14.25	13.00-14.00	12.50-13.75	13.25-14.25	13.75-14.50
400-550	12.75-13.50	12.25-13.25		12.75-13.75	12.25-14.00

SLAUGHTER CATTLE & CALVES:

STEERS:					
Prime:					
900-1100		29.25-31.75	28.00-30.00	28.75-30.50	
1100-1300		29.75-32.50	28.00-30.00	29.00-30.50	
1300-1500		29.50-32.50	28.00-30.00	28.50-30.25	
Choice:					
700-900	26.50-29.00	26.00-29.75	26.00-28.00		
900-1100	27.00-29.00	26.25-29.75	26.00-28.00	26.00-29.00	26.50-29.00
1100-1300	27.00-29.00	26.25-29.75	26.00-28.00	26.00-29.00	26.00-29.00
1300-1500	26.50-29.00	26.50-29.75	26.00-28.00	25.50-29.00	26.00-29.00
Good:					
700-900	22.50-27.00	23.00-26.25	22.50-26.00	22.50-26.00	23.00-26.50
900-1100	23.00-27.00	23.25-26.50	22.50-26.00	22.50-26.00	23.00-26.50
1100-1300	23.00-26.75	23.50-26.50	22.50-26.00	22.25-26.00	23.00-26.00
Standard,					
all wts.	20.50-23.00	20.50-23.50	18.75-22.50	19.00-22.50	20.00-23.00
Utility,					
all wts.	18.00-21.00	19.00-20.50	17.50-18.75	18.00-19.50	17.00-20.00
HEIFERS:					
Prime:					
900-1100		27.75-28.50	27.25-27.75	27.75-28.50	
Choice:					
700-900	25.75-28.00	25.75-27.75	25.50-27.25	25.75-27.75	25.50-27.25
900-1100	25.00-28.00	25.75-27.75	25.50-27.25	25.75-27.75	25.50-27.50
Good:					
600-800	23.00-25.75	23.50-26.00	22.00-25.50	21.50-26.00	23.00-25.50
800-1000	22.50-25.50	23.00-25.75	22.00-25.50	21.50-26.00	23.00-25.50
Standard,					
all wts.	19.00-23.00	20.00-23.00	18.25-22.00	19.00-21.50	19.00-23.00
Utility,					
all wts.	17.50-19.00	17.50-20.00	17.00-18.25	18.00-19.00	17.00-19.00
COWS, all wts.:					
Commercial	17.75-19.00	17.25-18.50	17.50-18.50	17.50-18.50	18.00-18.50
Utility	16.75-18.00	16.50-17.75	16.25-17.75	15.75-17.50	16.50-18.00
Cutter	16.00-17.50	15.25-17.00	15.00-16.50	14.50-16.00	15.00-16.50
Canner	13.50-16.00	13.75-15.25	14.00-15.25	13.50-15.00	14.00-15.00
BULLS (Yrli., Excl.) All Weights:					
Commercial	18.50-20.00	20.25-21.50	19.50-21.00	17.00-20.00	18.50-20.00
Utility	17.50-19.50	19.00-21.00	19.00-21.00	17.00-19.50	18.50-21.50
Cutter	16.00-18.00	17.50-19.00	17.75-19.00	16.00-17.00	18.50-20.50
VEALERS, All Weights:					
Ch. & pr.	26.00-33.00	32.00		27.00	30.00-34.00
Std. & gd.	20.00-27.00	20.00-31.00		19.00-25.00	21.00-30.00
CALVES (500 lbs., down):					
Choice	25.00-27.00				24.00-26.00
Std. & gd.	17.00-26.00				19.00-24.00
SHEEP & LAMBS:					
LAMBS (110 lbs. down):					
Choice	22.00	20.00-21.00	20.50	20.50-21.75	21.50
Good	19.00-20.50			19.50-20.50	
Springs,					
Ch. & pr.	23.00-25.00	25.50	24.25-25.50	23.00-25.00	24.50-25.00
LAMBS (105 lbs., down) (Shorn):					
Prime		20.50-21.50	21.00-21.75	21.00-21.75	21.50-22.00
Choice	19.50-22.00	19.50-21.00	20.25-21.25	20.00-21.00	19.75-21.50
Good	18.50-19.50	18.50-19.75	20.00-20.50	18.75-20.00	
EWES (Shorn):					
Gd. & ch.	5.00-6.00	5.00-6.50	4.00-6.50	4.75-6.50	5.00-6.00
Cull & util.	2.50-5.00	4.00-5.00	3.00-4.50	3.00-5.25	3.00-5.00

CORN BELT DIRECT TRADING

Des Moines, May 11—Prices on hogs at 14 plants and about 30 concentration yards in interior Iowa and southern Minnesota, as quoted by the U. S. Department of Agriculture:

BARROWS & GILTS: (Cwt.)			
U.S. No. 1, 200-220	\$15.50@16.65		
U.S. No. 1, 220-240	15.35@16.50		
U.S. No. 2, 200-240	15.10@16.25		
U.S. No. 2, 240-270	14.75@15.80		
U.S. No. 3, 200-240	15.05@15.85		
U.S. No. 3, 240-270	14.60@15.40		
U.S. No. 3, 270-300	14.00@14.95		
U.S. No. 1-2, 200-240	15.20@16.25		
U.S. No. 2-3, 200-240	15.10@16.00		
U.S. No. 2-3, 240-270	14.65@15.65		
U.S. No. 2-3, 270-300	14.20@15.20		
U.S. No. 1-3, 180-200	14.50@16.00		
U.S. No. 1-3, 200-240	15.10@16.25		
U.S. No. 1-3, 240-270	14.75@15.65		

SOWS:			
U.S. No. 1-3, 270-330	13.25@14.75		
U.S. No. 1-3, 330-400	12.55@14.25		
U.S. No. 1-3, 400-550	11.75@13.25		

Corn Belt hog receipts, as reported by the USDA:

	This week est.	Last week actual	Last year actual
May 5 ...	76,000	66,000	53,500
May 6 ...	37,000	55,000	37,500
May 7 ...	42,000	29,000	38,000
May 8 ...	81,000	60,000	84,000
May 9 ...	64,000	52,000	44,000
May 10 ...	55,000	68,000	55,000

LIVESTOCK PRICES AT ST. JOSEPH

Livestock prices at St. Joseph, Tuesday, May 10 were as follows:

CATTLE:		Cwt.
Steers, ch. & pr.	\$26.00@28.50	
Steers, good	23.00@25.50	
Heifers, gd. & ch.	22.00@26.50	
Cows, util. & com'l.	16.00@18.00	
Cows, can. & cut.	13.00@16.00	
Bulls, util. & com'l.	17.00@19.50	

VEALERS:		Cwt.
Good & choice	23.00@27.00	
Calves, gd. & ch.	21.00@25.00	

BARROWS & GILTS:		Cwt.
U.S. No. 1, 200/220	16.35@16.75	
U.S. No. 3, 220/240	15.75@16.00	
U.S. No. 3, 240/270	15.50@15.85	
U.S. No. 3, 270/300	15.00@15.50	
U.S. No. 1-2, 180/200	16.25@16.50	
U.S. No. 1-2, 200/220	15.65@16.65	
U.S. No. 2-3, 200/220	15.75@16.25	
U.S. No. 2-3, 220/240	15.25@16.50	
U.S. No. 2-3, 240/270	15.50@16.00	
U.S. No. 2-3, 270/300	15.00@15.60	
U.S. No. 1-3, 180/200	15.50@16.25	
U.S. No. 1-3, 200/220	15.75@16.25	
U.S. No. 1-3, 220/240	15.50@16.10	

SOWS, U. S. No. 1-3:		Cwt.
270/330 lbs.	14.25@14.50	
330/400 lbs.	13.50@14.25	
400/550 lbs.	12.75@13.50	

LAMBS:		Cwt.
Ch. & pr. (spring)	24.00@25.00	
Gd. & ch. (old crop)	20.50@21.00	

LIVESTOCK PRICES AT DENVER

Livestock prices at Denver on Tuesday, May 10 were as follows:

CATTLE:		Cwt.
Steers, choice	\$25.50@26.85	
Steers, good	23.00@25.00	
Heifers, gd. & ch.	23.00@25.85	
Cows, utility	16.00@18.00	
Cows, can.-cut.	13.50@15.50	

BARROWS & GILTS:		Cwt.
U.S. No. 1-2, 190/235	16.75@17.00	
U.S. No. 1-3, 190/245	16.50@17.00	
U.S. No. 2-3, 240/270	15.50@16.25	

SOWS, U. S. No. 1-3:		Cwt.
265/350 lbs.	14.00@14.50	
350/550 lbs.	12.00@14.00	

LAMBS:		Cwt.
Ch. & pr. (spring)	23.00@25.00	
Choice (old crop)	20.50@21.00	

LIVESTOCK PRICES AT INDIANAPOLIS

Livestock prices at Indianapolis, Tuesday, May 10 were as follows:

CATTLE:		Cwt.
Steers, choice	\$26.00@27.50	
Steers, good	23.50@25.50	
Heifers, gd. & ch.	22.50@26.00	
Cows, util. & com'l.	15.50@18.00	
Cows, can. & cut.	13.50@16.50	
Bulls, util. & com'l.	19.00@21.50	

VEALERS:		Cwt.
Choice & prime	31.00@32.00	
Good & choice	28.50@31.00	
Stand. & good	24.00@28.50	

BARROWS & GILTS:		Cwt.
U.S. No. 1, 200/220	16.65@16.75	
U.S. No. 3, 200/220	15.75@16.10	
U.S. No. 3, 220/240	15.50@16.00	
U.S. No. 3, 240/270	15.00@15.50	
U.S. No. 3, 270/300	14.75@15.25	
U.S. No. 1-2, 180/200	16.25@16.75	
U.S. No. 1-2, 200/220	16.25@16.75	
U.S. No. 1-2, 220/240	16.25@16.75	
U.S. No. 2-3, 200/220	16.00@16.50	
U.S. No. 2-3, 220/240	15.75@16.25	
U.S. No. 2-3, 240/270	15.00@15.75	
U.S. No. 2-3, 270/300	14.75@15.25	
U.S. No. 1-3, 180/200	16.00@16.50	
U.S. No. 1-3, 200/220	16.15@16.65	
U.S. No. 1-3, 220/240	15.75@16.50	
U.S. No. 1-3, 240/270	15.50@16.25	

SOWS, U. S. No. 1-3:		Cwt.
270/330 lbs.	13.75@14.50	
330/400 lbs.	13.50@13.75	
400/550 lbs.	12.25@13.50	

LAMBS:		Cwt.
Ch. & pr. (spring)	25.00	
Gd. & ch. (old crop)	20.00@22.00	

LIVESTOCK PRICES AT KANSAS CITY

Livestock prices at Kansas City, Tuesday, May 10 were as follows:

CATTLE:		Cwt.
Steers, choice	\$25.50@28.50	
Steers, good	23.25@26.25	
Steers, util. & std.	18.50@24.00	
Heifers, choice	25.50@27.75	
Heifers, good	22.50@25.50	
Cows, util. & com'l.	15.75@19.00	
Cows, can. & cut.	13.50@16.50	
Bulls, util. & com'l.	19.00@20.00	
Vealers, gd. & ch.	24.00@29.00	

BARROWS & GILTS:		Cwt.
U.S. No. 1-2, 180/200	none qtd.	
U.S. No. 1-2, 200/220	16.25@16.50	
U.S. No. 1-2, 220/240	none qtd.	
U.S. No. 2-3, 200/220	15.75@16.25	
U.S. No. 2-3, 220/240	15.50@16.25	
U.S. No. 2-3, 240/270	15.25@16.00	
U.S. No. 2-3, 270/300	14.50@15.50	
U.S. No. 1-3, 180/200	15.50@16.25	
U.S. No. 1-3, 200/220	16.00@16.25	
U.S. No. 1-3, 220/240	16.00@16.25	
U.S. No. 1-3, 240/270	15.50@16.00	

SOWS, U. S. No. 1-3:		Cwt.
270/330 lbs.	14.00@14.25	
330/400 lbs.	13.50@14.00	
400/550 lbs.	12.75@13.50	

LAMBS:		Cwt.
Ch. & pr. (spring)	24.00@25.50	
Choice (old crop)	20.00	

LIVESTOCK PRICES AT LOUISVILLE

Livestock prices at Louisville on Tuesday, May 10 were as follows:

CATTLE:		Cwt.
Steers, ch. & pr.	\$26.00@28.50	
Steers, std. & gd.	19.00@25.00	
Heifers, ch. & pr.	25.00@27.00	
Heifers, std. & gd.	22.00@25.00	
Cows, cut. & util.	15.00@18.00	
Cows, canner	12.00@15.00	
Bulls, util. & com'l.	20.00@21.00	

VEALERS:		Cwt.
Choice	31.00@33.00	
Good & choice	28.00@31.00	
Calves, gd. & ch.	20.00@26.00	

BARROWS & GILTS:		Cwt.
U.S. No. 1, 200/230	16.50@16.75	
U.S. No. 1-2, 190/240	16.00@16.50	
U.S. No. 1-3, 190/250	15.75@16.25	
U.S. No. 2-3, 190/250	15.50@16.25	

SOWS, U. S. No. 2-3:		Cwt.
250/350 lbs.	13.00@14.00	
400/600 lbs.	12.50@13.00	

LAMBS:		Cwt.
Ch. & pr. (spring)	24.50@25.00	
Util. & gd. (wooled)	16.00@20.00	

WEEKLY LIVESTOCK SLAUGHTER

Slaughter of livestock at major centers during the week ended May 7, 1960 (totals compared), as reported by the U. S. Department of Agriculture:

City or Area	Cattle	Calves	Hogs	Sheep
Boston, New York City area ¹	12,523	9,882	49,607	38,574
Baltimore, Philadelphia	9,160	2,238	24,894	5,086
Cincy., Cleve., Detroit, Indpls.	19,701	4,229	142,221	12,684
Chicago area	18,737	5,238	35,106	6,267
St. Paul-Wis. areas ²	31,091	17,163	111,079	10,168
St. Louis area ³	11,327	1,224	100,838	4,353
Sioux City-So. Dak. area ⁴	21,895	...	93,944	12,778
Omaha area ⁵	36,339	167	82,990	13,851
Kansas City	13,868	...	42,012	...
Iowa-So. Minnesota ⁶	30,438	7,980	268,546	28,583
Louisville, Evansville, Nashville, Memphis	6,313	3,415	70,377	...
Georgia-Florida-Alabama area ⁷	7,872	3,212	35,813	...
St. Joseph, Wichita, Okla. City	20,447	1,287	47,859	9,911
Ft. Worth, Dallas, San Antonio	11,092	4,725	20,687	39,427
Denver, Ogden, Salt Lake City	21,264	259	17,838	24,927
Los Angeles, San Fran. areas ⁸	24,938	1,826	28,210	36,711
Portland, Seattle, Spokane	7,327	238	14,814	3,662
GRAND TOTALS	304,332	63,065	1,186,835	246,982
Totals same week 1959	283,028	62,304	1,077,243	221,252

¹Includes Brooklyn, Newark and Jersey City. ²Includes St. Paul, So. St. Paul, Minn., and Madison, Milwaukee, Green Bay, Wis. ³Includes St. Louis National Stockyards, E. St. Louis, Ill., and St. Louis, Mo. ⁴Includes Sioux Falls, Huron, Mitchell, Madison, and Watertown, S. Dak. ⁵Includes Lincoln and Fremont, Neb., and Glenwood, Iowa. ⁶Includes Albert Lea, Austin and Winona, Minn., Cedar Rapids, Davenport, Des Moines, Dubuque, Estherville, Fort Dodge, Marshalltown, Mason City, Ottumwa, Postville, Storm Lake and Waterloo, Iowa. ⁷Includes Birmingham, Dothan and Montgomery, Ala., Albany, Atlanta, Augusta, Moultrie and Thomasville, Ga., Bartow, Hialeah, Jacksonville, Ocala and Quincy, Fla. ⁸Includes Los Angeles, San Francisco, So. San Francisco, San Jose and Vallejo, Calif.

LIVESTOCK PRICES AT 10 CANADIAN MARKETS

Average prices per cwt. paid for specific grades of steers, calves, hogs and lambs at 10 leading markets in Canada during the week ended April 30 compared with same week in 1959, as reported to the Provisioner by the Canadian Department of Agriculture:

	GOOD STEERS		VEAL CALVES		HOGS*		LAMBS	
	All wts.		Gd. & Ch.		Grade B ¹		Good	
	1960	1959	1960	1959	1960	1959	1960	1959
Toronto	\$22.00	\$25.00	\$30.87	\$34.00	\$20.83	\$24.00	\$24.74	\$24.00
Montreal	22.85	24.55	25.55	26.50	22.16	24.40	...	...
Winnipeg	21.04	23.71	30.01	32.26	19.87	21.50	21.46	19.00
Calgary	20.10	22.70	23.70	27.70	18.55	20.60	20.20	17.70
Edmonton	20.20	21.90	27.30	30.00	18.75	20.75	19.40	18.00
Lethbridge	20.50	22.70	...	28.00	18.27	20.50	19.50	18.50
Pr. Albert	19.80	21.80	26.25	26.75	18.85	20.50	16.50	...
Moose Jaw	20.25	22.40	25.00	27.00	19.00	20.50	...	16.75
Saskatoon	20.40	22.25	27.00	29.00	18.75	20.50	...	16.25
Regina	20.25	22.25	29.00	30.00	19.25	20.50	...	...

*Canadian government quality premium not included.

SOUTHERN LIVESTOCK RECEIPTS

Receipts at six packing plant stockyards located in Albany, Columbus, Moultrie, Thomasville, Ga.; Dothan, Ala.; and Jacksonville, Fla., week ended May 7:

	Cattle and Calves	Hogs
Week ended May 7 (estimated)	3,500	22,800
Week previous (six days)	2,993	19,430
Corresponding week last year	2,317	15,988

CANADIAN KILL

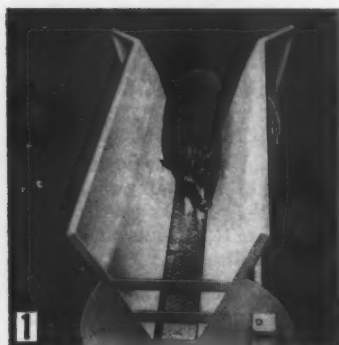
Inspected slaughter of livestock in Canada, week ended Apr. 30, compared:

	Week ended Apr. 30	Same week 1959
CATTLE		
Western Canada	18,125	16,828
Eastern Canada	18,573	17,190
Totals	36,698	34,018
HOGS		
Western Canada	70,719	83,261
Eastern Canada	75,055	85,338
Totals	145,774	168,599
All hog carcasses graded	159,334	178,841
SHEEP		
Western Canada	2,439	1,995
Eastern Canada	2,360	2,150
Totals	4,799	4,145

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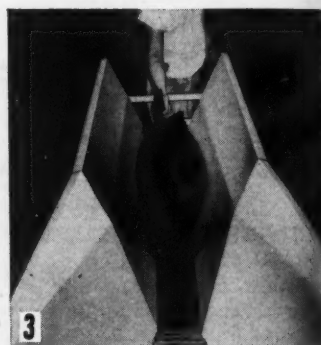
1. Keep animals calm before slaughter. Hogs will enter the Koch Hog Holder with little or no prodding. The level floor of the V-shaped Holder is more inviting to the hog than the ramp that leads up to it.

2. Effective restraint. The weight of the hog makes the floor drop suddenly, while the V-shaped contour of the sides holds animals of any weight helpless. Operator holds Koch Cash-X Stunner waist-high. Hog is unable to dodge.

3. Simple and convenient for workmen. Operation of Koch Cash-X Stunner needs only one hand, and takes place in a fraction of a second. Fatigue is eliminated. Workmen are absolutely safe, since there is no bullet involved. Indeed there is so little muscular exertion that anybody can learn the operation easily.

4. Effortless discharge of holder. The weight of the unconscious animal is enough to cause the Koch Hog Holder to pivot and dump when the operator unlatches it. Then when empty, the holder swings back automatically with floor back in place, ready for the next animal.

Hogs are delivered alive but unconscious to the sticker. The normal action of heart and lungs assists complete and rapid bleeding after sticking.



3



2



4

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The Meat Trail...

Yucatan Meat Processor Sees How It's Done at Sugardale

A meat processor from the Mexican city of Merida, Yucatan, was brought up to date on modern production methods during a recent exchange visit to The Sugardale Provision Co., Canton, O. He is HENRY BOYANCE CERVERA, who owns Empacadora Boyance jointly with his father.

Cervera met CARL LAVIN, Sugardale sausage department product manager, when Lavin was vacationing in Yucatan a few months ago. Lavin visited the Cervera plant and found operations about at the point where U. S. plants were 25 years



IN TURN-ABOUT role as host, Carl Lavin (right) shows Sugardale operations to H. B. Cervera of Mexico.

ago. For example, cellulose casings are used for wieners, but the wieners are linked by hand rather than by automatic machine. The company employs 28 persons, who use the equipment Cervera's father purchased in Chicago several years ago when he began operations.

The big difference noted by Lavin was in transportation. Merida, which exists primarily because of sisal plantations, is surrounded by jungle. Each day, 300 Indians walk to the Empacadora Boyance carrying about 15 lbs. of meat apiece from their own slaughtered livestock. The company's line includes wieners, bacon, smoked ham, boiled ham, bologna, mortadella and salami. The firm ships 40 per cent of its products by air to six of the Mexican states, and 60 per cent is delivered by bicycle in Merida.

The company supports its selling

efforts with a heavy advertising schedule that includes radio spot announcements throughout the day, daily newspaper ads and three ads per day in three of the 30 movie theaters in Merida.

Cervera hopes to incorporate into his plant many of the modern methods he observed at Sugardale.

Ehrenfeld Named President Of National Meat Canners

JOHN H. EHRENFELD, manager of the canned meat division of Libby, McNeill & Libby, Chicago, has been elected president of the National Meat Canners Association, JOHN H. MONINGER, secretary of the group, announced. Ehrenfeld has been a director of the association for four years and served as NMCA vice president for the past two years.



J. EHRENFELD

Ehrenfeld was graduated from the University of Pittsburgh in 1939. He joined Libby the next year and in 1947 was made district manager for Libby's canned foods in the Pittsburgh area. He was transferred to the canned meat division of the company shortly thereafter and became its manager in 1953.

Other officers of the association are: J. B. STEARN of Swift & Company, Chicago, vice president; ELMER SPATH of Agar Packing Co., Chicago, treasurer, and Moninger,

secretary. New directors are LARRY HERMAN of Hygrade Food Products Corp., Detroit; J. M. HOERNER of Armour and Company, Chicago, and GEORGE C. SEYBOLT of William Underwood Co., Watertown, Mass.

JOBS

JOHN HARTMEYER, executive vice president of Marhoefer Packing Company, Inc., Muncie, Ind., has announced the appointment of J. S. (JIM) AUSTIN as assistant general manager in charge of sales at the firm's Postville, Ia., beef killing establishment.

FRED P. PECIS has been appointed general sales manager of the Swift & Company meat packing plant at South St. Joseph, Mo. Pecis started his career with Swift in 1933 in Chicago and since 1941 has been primarily in sales work. Positions he has held with Swift include district manager of the Chicago sales territory. Pecis has been active in civic affairs at Richton Park, Ill., for many years. For the past three years, he has been a member of the Richton Park village board.



F. P. PECIS

JOHN PROUT has been named general manager and NORMAN LABEAU, credit manager, of S. Karger & Sons, Houghton, Mich. The changes were made as a result of the purchase of all stock owned by HARRY KARGER, who sold his interests in the firm



FOURTH ANNUAL convention and suppliers exposition of Texas Independent Meat Packers Association, set for August 12-13 at Shamrock Hotel, Houston, is being planned by above group. Standing (l. to r.) are Bill Cash, Rene Mouton, Jim Camp, Red Sullenger, Joe Coble, Joe Tramonte and Jack Stallings. Seated are Howard Kantor, Milton Freedman, Bob Schoo'er, general convention chairman Louis Lampo, Jasper Tramonte and Tom Donovan. National and local speakers will address convention on variety of subjects.

and established a new business in Ft. Lauderdale, Fla. Now in its 102nd year, S. Karger & Sons is one of the oldest meat and sausage firms to remain in one family. Other officers are: FRANK S. KARGER, president; SIDNEY W. KARGER, vice president, and BETTY KARGER, a director.

RICHARD (DICK) KNOWLTON has been advanced from manager of the Minnesota sales division to merchandising manager and assistant general sales manager at Geo. A. Hormel & Co., Austin, Minn. A graduate of the University of Colorado, he worked at the Austin plant



R. KNOWLTON

during summer vacations from school. Knowlton, who joined Hormel permanently in 1956, worked in sales merchandising at the Fremont, Neb., plant until May, 1959, when he was transferred to Austin.

PLANTS

The three-story building formerly occupied by Hess Sausage & Provisions Co. at 2300 N. Third st., Milwaukee, has been sold to a group headed by LEO N. LEVY of Milwaukee. The Hess concern ceased operations last September 30 after 69 years in the sausage business.

Woidat Meat Co. of Streator, Ill., plans to move into the former Streator Meat Packing Co. plant late this year or early in 1961 after extensive remodeling of the property, RICHARD WOIDAT, owner of the meat jobbing firm, announced.

An explosion caused by gas fumes blew out a brick smokehouse wall at Sunnyland Packing Co., Thomas-

ville, Ga., and destroyed about 16,000 lbs. of hams. Plant superintendent HOSEA VANN estimated the damage at \$20,000.

Metropolitan Sausage Manufacturing Co., Inc., Chicago, recently completed a \$70,000 plant remodeling program, WILLARD M. PAYNE, SR., president, announced. The business, which was started by Payne in his wife's kitchen, now employs 20 persons. His wife, JIMMIE, is secretary-treasurer of the company.

Iowa Wholesale Meat Co., Inc., has opened at 2215 N. 35th ave., Phoenix, Ariz. MEYER ORLIKOFF, president and director of sales, said the new firm will be exclusive distributor in that area for Sioux City Dressed Beef, Inc., and Sioux City Dressed Pork Co., both located in Sioux City, Ia.

A new meat packing plant, Narkeeta, Inc., was opened recently in Daleville, Miss. The plant, which features locker rental, will do custom work for farmers and will offer wholesale meats to restaurants and grocers, J. D. McWILLIAMS, manager, has announced. CHARLES QUINNELL is assistant manager.

The institutional foods division of Franklin MacVeagh & Co., Chicago food wholesaler, has added a large frozen food department, including a line of portion control frozen meats in prepackaged cuts and roasts, sales manager JOSEPH W. MODL announced.

The Rath Packing Co., Waterloo, Ia., has established a livestock buying station at Columbus Junction, Ia. RUSSELL GREENE, manager of the Rath livestock buying station at Webster City, Ia., since 1955, has been named manager of the new station. Rath announced last month that it has purchased a 126-acre



LOOKING over store-wide merchandising material are Richard T. Klas (left), who has been named manager of Swift & Company's merchandising service department, with headquarters in Chicago general office, and Henry Schumacher, who is retiring after nearly 43 years with company. Klas, who succeeds Schumacher in managerial position, started with Swift in 1947 as a salesman. Primary objective of department is to help dealers increase their sales and profits.

tract of land near Columbus Junction and is considering building a small hog slaughtering facility there.

DEATHS

CARL W. SCHRAEGLE, 50, who had been owner of Schraegle's Meat Market in the Cleveland area, has died. He formerly had been a salesman with Hildebrand Provision Co.

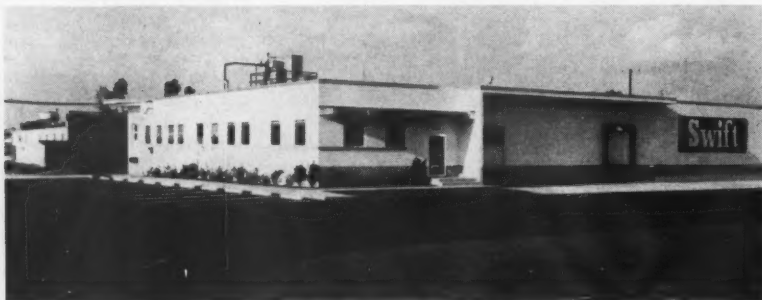
FRANK M. BRUNER, 80, who formerly had been local representative of the Denver office of Swift & Company, has died. He was a veteran of the Spanish-American War.

STANLEY MELOSKI, who had been associated with Swift & Company for 44 years, died recently at 61.

RAYMOND I. BERLEPSCH, 34, who had been employed for 14 years by Wilson & Co., Inc., New Haven, Conn., died recently.

JOHN HOUSEMAN, 71, a retired beef house manager for John Morrell & Co., is dead. He was a member of Morrell's "25-year club" and the American Meat Institute.

CHARLES ZITNIK, 67, vice president and treasurer of H. Elkan & Co., Chicago, hide dealers and exporters, passed away recently. He



SWIFT & COMPANY recently shifted its sales unit operations at Orlando, Fla., to new one-story building (pictured above) with concrete block exterior walls and a reinforced concrete roof. Facilities include beef cooler, with boning facilities, freezer and combination poultry and salt meat cooler. The truck dock allows loading directly from refrigerated area to refrigerated truck or from dry storage area to truck. H. D. Mims is manager of the sales operation.

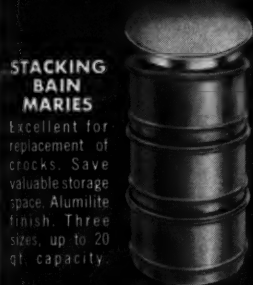
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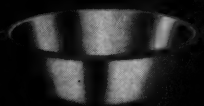


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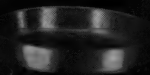


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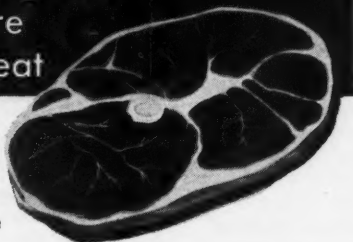
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Chicago Corned Beef Corporation

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had been with the company for a period of about 21 years.

TRAILMARKS

A. W. STAND, assistant manager of casing sales for Armour and Company, Chicago, retired from Armour recently and immediately stepped into a new job as general chairman of a committee to raise funds for underprivileged youth. The group Stand now works for is the Catholic Youth Organization, sponsored by the Knights of Columbus. He served 47 years with Armour.

SOL HIRSCH of Eastern Meats, Inc., New York City, will be honored by the meat and poultry division of the United Jewish Appeal at the group's annual dinner on Tuesday, May 17, at the Hotel Manhattan, New York City. **BENJAMIN LOWENSTEIN** of J. Lowenstein & Son, Inc., general chairman of the trade drive, said Hirsch will be hailed for his long service to the industry and his dedication to philanthropic activities.

Dr. FRANK R. THORNDIKE, inspector in charge of the San Francisco federal meat inspection station, has been awarded the Certificate of Merit for performance substantially exceeding the requirements of his position, as well as a special cash award, announced Dr. B.



DR. THORNDIKE

T. SHAW administrator, Agricultural Research Service, U. S. Department of Agriculture, Washington, D. C. This award was for assuming full responsibility for the Meat Inspection Division program in 67 official slaughtering and meat processing establishments and import-export activities in the San Francisco area.

Dr. Thorndike entered the Meat Inspection Division in 1940 and transferred from Sioux City, Ia., to San Francisco as inspector in charge in December, 1956.

WAYNE CARR of Cincinnati, Ia., was re-elected president of the Polled Shorthorn Society during the National Polled Shorthorn Congress in Hutchinson, Kan.

S. KENT CHRISTENSEN, associate professor of marketing at Oregon State College, will join the staff of the National Association of Food Chains early in June as coordinator of agricultural campaigns and promotions under NAFC's farmer-re-



GEORGE SCHLERETH (left), vice president of H. H. Meyer Packing Co., Cincinnati, presents wrist watches to two newly-elected members of firm's Quarter Century Club, Mrs. Maude West and Carl Wohlwender. Presentation took place at recent 10th annual dinner meeting of 25-year veteran club which has 82 active and 21 retired members. Newly-elected officers were installed at meeting: president, Walter Allgeier; vice president, Peter Clark; treasurer, Katherine Gergen; chaplain, Clarence Washington; secretary, Fred Buhrmann.

tailer marketing program. His background includes work in the livestock, poultry and dairy industries. Christensen is a member of the Oregon Beef Council and is serving on a five-man survey committee sponsored by the American Feed Manufacturing and National Poultry Commodity groups.

LEONARD L. PFAELZER of Pfaelzer Brothers, Inc., Chicago, has been elected a member of the board of governors of Louis A. Weiss Memorial Hospital in that city. Pfaelzer also is vice president, treasurer and a director of Illinois Packing Co., a Chicago organization.

WILLIAM L. LAVIN, executive vice president of The Sugardale Provision Co., Canton, O., is spending the month of May on a combination business-pleasure tour of the Far East. He and Mrs. Lavin will tour the Hawaiian Islands before flying to Tokyo, Japan. Lavin intends to visit some of the meat packing companies and retail food stores in the Japanese cities of Tokyo, Yokohama, Miyashita, Atami, Kyoto, Kobe, Shikoku, Takamatsu, Osaka and Nikko. The Lavins will spend a week in Hong Kong on their return trip.



W. L. LAVIN

PROSSER E. CLARK, chairman of the marketing agencies committee of the Western States Meat Packers Association, has been named Oregon

state chairman of the committee backing **HOWARD BELTON** for state treasurer. The WSMAPA committee chairman is a partner in Benson, Bodine & Clark Commission Co., North Portland, Ore.

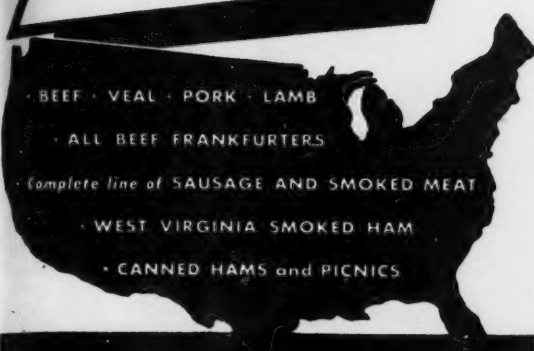
FRANK K. FOSS, vice president of Wilson & Co., Inc., Chicago, in charge of foreign operations and export, has retired after 43 years of service. Foss started to work for Wilson during his summer vacations while a college student. Following his graduation from Cornell University and World War I service in naval aviation, he returned to Wilson as a student cattle buyer. He was appointed assistant manager of the company's Buenos Aires plant in 1921 and promoted to manager in 1927. He returned to the headquarters offices as head cattle buyer in 1936. In 1939, he was elected a vice president. As a member of the American team in the 1920 Olympics at Antwerp, Belgium, Foss won the pole vault championship and established a new world record of 13 ft. 5 1/8 in.



F. K. FOSS

The first convention of the New England Wholesale Meat Dealers Association, Boston, will be held September 2 to 5, 1960, at The Balsams, Dixville Notch, N.H. The convention will combine discussions of industry problems with entertain-

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 A NATIONAL PROVISIONER PUBLICATION

THE NATIONAL PROVISIONER, MAY 14, 1960

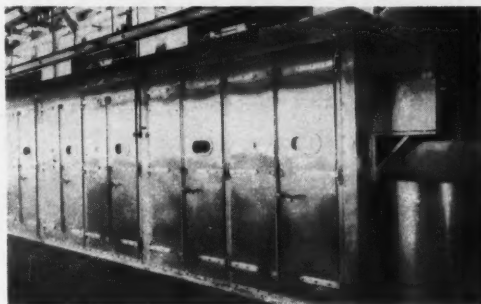
SMOKEHOUSE

Superiority

by **JULIAN**



DESIGN and ENGINEERING . . .
 . . . are the key to Julian superiority. Every Julian smokehouse is custom-designed and custom-engineered for your specific smokehouse requirements. Every Julian smokehouse is a "special job".



INSTALLATION . . . is all important if your smokehouse is to exactly fit your needs. With a custom-installed Julian you can be sure of peak quality.

Julian **ENGINEERING CO.**

5127 N. Damen Ave. • Longbeach 1-4295 • Chicago 25, Ill.

West Coast Representative:
 Meat Packers Equipment Co., 1226 49th Ave., Oakland 1, California
 Canadian Representative:
 McLean Machinery Co., Ltd., Winnipeg, Canada
JULIAN SMOKEHOUSES — AN INDUSTRY STANDARD

ment, according to HAROLD H. SNYDER, president of the association.

DR. J. R. VICKERY, chief of the food preservation division, Australian Commonwealth Scientific and Industrial Research Organization, has received the 1960 international award of the Institute of Food Technologists, Chicago, for his "out-

standing efforts in promoting the international exchange of ideas in the field of food technology." His personal research interests have centered mainly on the chemical and physical aspects of the preservation of meat and other foods.

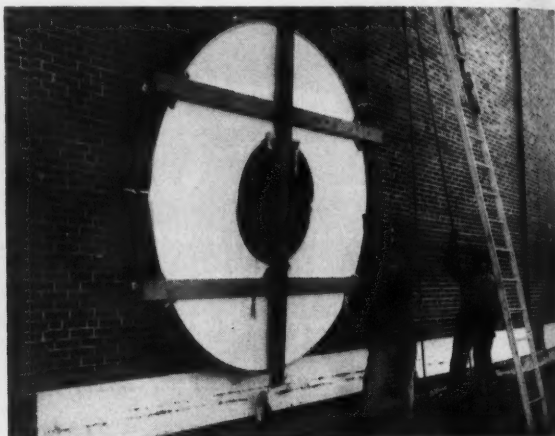
Bradley University, Peoria, Ill., has received a \$500 contribution

from the Oscar Mayer Foundation, Inc., Chicago. Dr. HAROLD P. RODER, president of the university, announced recently.

STAN FANESTIL, who owns and operates Fanestil Packing Co., Emporia, Kan., has been named executive vice president of the Madison, Kan., Bank.



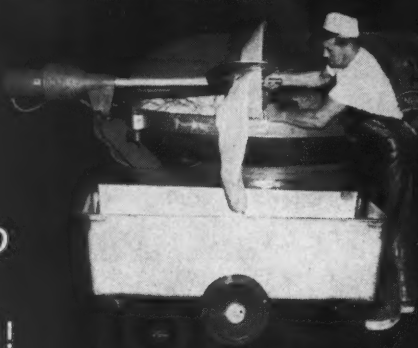
LEFT: Motorists traveling on nearly-completed Interstate Freeway 90— $\frac{1}{4}$ -mile north of Austin, Minn., packing-house of Geo. A. Hormel & Co.—will find no difficulty in seeing large neon sign bearing firm's name in glowing white letters. Mounted at fifth floor level (about



50 ft. from ground), sign is 120 ft. wide and 10 ft. high. Neon lighting is controlled electronically. RIGHT: Letters have stainless steel sides and back and plastic front. Each letter is nearly 10 ft. high and 18 in. in depth. They are said to be largest sign letters in area.

BETTER MEAT PRODUCTS-LESS WORK WERNER CUTTER-MIXER

CUTTER
AND
MIXER
COMBINED
IN ONE
MACHINE!



MADE IN U.S.A.

This stream-lined, easy-to-clean meat cutter with built-in mixer will improve your product and lessen your work. Cuts, chops, mixes and homogenizes, all in one operation. No separation of fat; no hand-turning of meat. Push-button controls placed for operator's safety and convenience. Individual motor drives; turret-mounted bowl—years of trouble-free operation. Two speeds on cutter; two on bowl. Bowl operates independently of cutter and mixer. Dial revolution counter; removable thermometer. Unloads cleanly, without a trough. Air-lifted cover; stainless mixer and cutter blades. A new performance champion in its field; booklet and specifications on request.

WERNER MANUFACTURING CO.

209 North St.

Fulton 7-3226

Yale, Michigan

C A N C A N B E C U R E D

More than one million Americans are living proof. Remember . . . your contributions helped save many of these lives. Your continuing contributions are needed to help discover new cures and, ultimately, the prevention of cancer itself • Remember, too, if you delay seeing your physician, you drastically cut your chances of cure. Annual checkups are the best way of detecting cancer in time • Guard your family! Fight cancer with a checkup and a check.

AMERICAN CANCER SOCIETY

CLASSIFIED ADVERTISING

Undisplayed, set solid. Minimum 20 words, \$5.00; additional words, 20c each. "Position Wanted," special rate; minimum 20 words, \$3.50; additional words, 20c each.

Count address or box numbers as 8 words. Headlines, 75c extra. Listing advertisements, 75c per line. Displayed, \$11.00 per inch.

Unless Specifically Instructed Otherwise, All Classified Advertisements Will Be Inserted Over a Blind Box Number.

CLASSIFIED ADVERTISING PAYABLE IN ADVANCE PLEASE REMIT WITH ORDER

PLANTS FOR SALE

MODERN BEEF PLANT

In Chicago. 4 beds, capable of handling 1800 cattle per week. 2 truck loading docks and rail siding for loading 2 cars. In excellent condition. Ready to operate. Under U.S.D.A. inspection. Plenty of room for expansion.

FS-179, THE NATIONAL PROVISIONER 15 W. Huron St., Chicago 10, Ill.

FOR SALE OR LEASE: Small modern packing house complete with all slaughtering, processing and delivery equipment in excellent condition. Free gas, water and oil lease. Located on 35 acres close to all northern Ohio major cities. Terms can be arranged. FS-231, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SLAUGHTER HOUSE: Manchester, Connecticut. With unlimited license and beautiful country home on 25 acres, high land. Near all major cities. Price \$45,000. Call MANCHESTER, MI 9-1500

EQUIPMENT FOR SALE

2-French Oil Mill dry rendering cookers, 5'x9', in perfect condition.

1-Dupps Hasher, with 40 H.P. motor, 3 phase. Priced right.

Charles Abrams Co., Inc., 460 N. American St., Philadelphia 23, Penna., Phone Wa. 2-2218

EQUIPMENT WANTED

ALLBRIGHT-NELL BELLY PUMPING MACHINE. SUGARDALE PROVISION COMPANY, P. O. Box 310, CANTON 1, OHIO TELEPHONE GLENDALE 5-5253.

WANTED: Allbright-Nell ham molds. Second hand. 4 x 4 x 27 or 4 1/2 x 4 1/2 x 27. EW-214, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

WANTED: Used coal fired boiler 50-60 H.P. Fire box or package type. 100 lbs. pressure. R. J. EVERS, Kentland, Indiana

WANTED: Used 80-A BOSS SILENT CUTTER in good condition. Contact HICKORY PACKING CO., P. O. Box 567, Scranton, Pa.

WANTED: One or two good used refrigerated trucks. Must be in good operating condition. EW-223, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

WANTED TO BUY: Used VOTATOR JR. Model in good condition. YOUNG'S PACKING CO., INC., 801 South Main St., Decatur, Ill.

MISCELLANEOUS

HOG • CATTLE • SHEEP
SAUSAGE CASINGS
ANIMAL GLANDS

Selling Agent • Order Buyer

Broker • Counsellor • Exporter • Importer

SAMI S. SVENDSEN

407 SO. DEARBORN ST., CHICAGO 5, ILL.

THE NATIONAL PROVISIONER, MAY 14, 1960

EQUIPMENT FOR SALE

THE LAZAR COMPANY

(Cy Lazar)

brokers • dealers • sales agents • appraisers

845 S. WABASH AVE., CHICAGO 5, ILL.
PHONE HARRISON 7-6797

NEW—USED—REBUILT

MACHINERY FOR MEAT PACKERS—
RENDERERS—SAUSAGE PROCESSORS
and ALLIED FOOD INDUSTRIES

LIQUIDATION

COMPLETE RENDERING LAYOUT

LOCATION: Newark, New Jersey

Cookers (4) Allbright Nell, 5' x 12' jacketed heads, No. 3 drives, 25 HP motors, w/percolating pans. One new 1957, 3 new 1950.

CRACKLING PRESSES (4) 300 ton Allbright Nell with steam pumps.

Hogs (2) Mitts & Merrill. One 13 CD 40 HP mtr, one 15 CRE 75 HP motor.

Hasher-Washer (1) Allbright Nell.

Storage Tanks (3) 10,000 gal. Railroad car tanks—with colls.

Boilers (1) 300 HP Ames, oil fired; New 1956.

For #6 oil

(1) 150 HP Ames, oil fired; New 1946.

For #8 oil

Many other items as well as

* Complete garage w/air compressor and greasing equipment

* Locker room (50 new lockers)

* Office w/desks and safe.

Call us at once for specifications, and arrange to see this plant.

AARON EQUIPMENT COMPANY

Dealers in new, used and rebuilt equipment for the Food, Chemical, and allied processing industries.

9370 Byron Street

Schiller Park, Illinois

Gladstone 1-1500

We buy your surplus equipment

ANDERSON EXPELLERS

All Models, Rebuilt, Guaranteed

We Lease Expellers

PITTOCK & ASSOCIATES, Glen Riddle, Penn.

ONE-DUPPS Company 6' inside diameter cooker, 6'-6" outside by 14'-6" long. Complete with 40 H.P. motor, type A717, with fully enclosed 10" face herringbone gear drive. Unit has been inspected and approved by Hartford. Available for immediate shipment. Fully reconditioned. WM. STAPPENBACH and Sons, Rochester, N. Y.

FOR SALE: Oil and waste saving cooker, 4 x 7, steel jacketed, complete. One new, two eight years old. BARTH SMELTING & REFINING WORKS, Inc. 125 Chapel St., Newark, N. J.

FOR SALE: One No. 45 Roller Bearing Diamond Hog in good condition. FS-186, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

CRYOVAC CLIPPER: Model #HT-KO. Serial #10536. This machine is in very good shape, and will be ready for inspection at all times. Contact Curt Pieper, % Gus Glaser Meats, Inc., Fort Dodge, Iowa. Phone 3-7871

FOR SALE: Baker-Perkins 200 gallon sigma blade mixers or shredders, jacketed, double arm, with or without motor. Lowest price ever. PERRY EQUIPMENT CORP., 1404 N. 6th St., Philadelphia 22, Pa.

BARLIANT'S WEEKLY SPECIALS

We list below some of our current offerings for sale of machinery and equipment available for prompt shipment.

Current General Offerings

- 2691—BACON PRESS: Dohm & Nelke Bacon Master Senior model, stainless steel cabinet, like new, excellent condition\$1,750.00
- 2687—SLICERS: (2) Enterprise mdl. #480A, w/stacker & weigher, very good cond.....ea. \$3,000.00
- 2670—STUFFER: Boss 500# cap., w/valves & piping, late model\$1,000.00
- 2079—STUFFERS: (2) Buffalo, 1000#.....ea. \$2,950.00
- 2692—STUFFING TABLES: (2) stainless, 12' x 58" x 38" high, adj. legs, curved ends.....ea. \$ 125.00
- 2694—GRINDER: Anco mdl. 766A, 20 HP., reconditioned & guaranteed\$1,350.00
- 2495—MIXER: Buffalo #2, 400# capacity, 3 HP. motor, reconditioned\$ 675.00
- 2693—SAUSAGE CAGES: (30) 40-station, 37 1/2" x 48" x 42" high, w/dble. trolley, 36" sticks.....ea. \$ 12.50
- 2214—MAGNETIC TRAPS: (12) Cesco.....ea. \$ 95.00
- 2525—FAT DICER: Buffalo mdl. FC, 2 HP. mtr., rebuilt, excellent cond.\$ 550.00
- 1967—SAUSAGE MEAT DISPENSER: Boss, size #2, 3/4 lb. to 5 lb.\$ 225.00
- 2563—HYDRAULIC PRESS: Dupps 'Rujak', 300 ton, w/elec. Pump, excel. cond.\$3,250.00
- 2087—EXPPELLER: Anderson Red Lion, 15 HP. mtr., factory rebuilt\$3,000.00
- 2639—COOKERS: (7) Globe 5 x 16', ktd. head, 30 HP. & drive, like new cond.....ea. \$6,000.00
- 2642—DRY RENDERING COOKERS: Anco 5 x 9, w/flat bolted heads, mtr. & drive.....ea. \$1,000.00
- 2034 SHREDDER: Boss #35, with 30 HP. motor, starting equipment\$ 850.00
- 2546—HYDRAULIC CURB PRESSES: (2) Globe, 500 ton capacityea. \$4,250.00
- 2011—BACON PERMEATOR: Boss #247.....\$1,650.00
- 2344—BACON SKINNER: Townsend #52, completely reconditioned\$1,950.00
- 9356—LOAF STUFFER: Mepaco, all stainless, air operated\$ 225.00
- 2418—HAM PRESS: Griffith hydraulic, 1/2 HP. motor, w/Hydraulic Pump\$ 450.00
- 2675—PICKLE PUMP: Griffith 'Big Boy', all stainless steel, model #11\$ 595.00
- 2521—HAM MOLDS: Globe Hoy, stainless steel, with covers & springsea. \$ 12.75
- (103) #109, 12" x 4 1/2" x 5 3/4"
- (110) #116, 12 1/2" x 6 1/2" x 8 1/2"
- 2110—LOAF MOLDS: (250) Globe Hoy #44-S, stainless steel, 10" x 4 1/2" x 4 1/2"ea. \$ 5.00
- 2366—LOAF MOLDS: (215) Globe Hoy #55-S, stainless steel, 10" x 4 1/2" x 4 1/2"ea. \$ 4.75
- 2187—LOAF PANS: (300) Best & Donovan, stainless, 10" x 5" x 4", 4 1/2" cap., A-1 cond.....ea. \$ 2.25
- 2490—PORTABLE FREEZER: Annapolis Yacht Yard section, alum. armorply, 8' x 6' x 8 1/2" high, complete w/Freon Refrigeration & water cooled condensing unit\$2,750.00
- 2008—ICE CUBE MAKERS: (2) York model #225, with 150 lb. binsea. \$ 325.00
- 2676—EXACT WEIGHT SCALES: mdls. 273-253-213, good conditionea. \$ 85.00
- 2329—KETTLE: Groan mdl. N-40, 40 gal., stainless steel, jacketed, 40# W.P.\$ 225.00
- 5425—BEEF TROLLEYS: (5000) hindquarter, with 4 1/2" wheels:ea. \$ 1.35
- 8" stainless steel hookea. \$.75
- 8" galvanized hookea. \$.75

EXTRA

Watch for announcement on the liquidation of a complete model Beef Kill & Processing plant, located in the South.

All items subject to prior sale and confirmation

- New, Used & Rebuilt Equipment
- Liquidators and Appraisers

WRITE FOR FULL PARTICULARS

1631 S. Michigan Ave., Chicago 16, Ill.
WABash 2-5550

BARLIANT & CO.

CLASSIFIED ADVERTISING

[Continued from page 49]

POSITION WANTED

COLLEGE GRADUATE 1958: Young man with B.S. degree in agriculture with special emphasis in meats and animal husbandry, desires to relocate in Kentucky, southern Indiana, southern Illinois or southern Ohio. Presently employed in the meat industry. Desires employment in merchandising, advertising, meat brokerage, packing house supervision or livestock buying or selling. Willing to start at the bottom and work hard. Excellent references. Write Box W-224, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

OPPORTUNITY WANTED: By young German with complete knowledge of Kosher line, sausage, smoked meats and corned beef. Have held position in this country as foreman. Desire position with opportunity for advancement in large modern plant. Willing to travel. W-204, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANT SUPERINTENDENT: Rendering. Experienced in management, operation, production, equipment, new construction, air conditioning, steam and power, grievances, negotiations. Eastern United States. W-218, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

ENGINEER: Steam, refrigeration, electrical, construction, slicing, packaging and maintenance. Engineer for packing plant. References. W-233, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

INDUSTRIAL ENGINEER: Install or maintain standards, improve productivity, and control manufacturing costs. 8 years' experience in meat processing. Age 35. W-234, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MANAGER-SUPERINTENDENT: Experienced, large and small plants. Practical, efficient. Slaughtering, cutting, sausage, canning, curing, rendering, livestock etc. Excellent reference. W-236, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

HOG BUYER: I wish to contact packer in need of hog buyer. 20 years' experience on terminal market as packer and order buyer. W-235, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

LIVESTOCK BUYER: 25 years' experience. Age 47. Available now. References furnished. Will go anywhere. W-237, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SAUSAGE FOREMAN: 30 years' experience in state and federal plants. Available immediately. ORVILLE COOPER, 587 Spruce St., East Alton, Ill.

PLANT SUPERINTENDENT
Man Friday to general manager, owner. Age 39, married. 24 years' well rounded experience in beef, hog, sheep, kill, boning, rendering, hides. Able to teach. Locate anywhere. W-219, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

CANNING PLANT MANAGER: 20 years' experience in all phases of meat and specialty items, purchasing, production, costs, yields, quality control. W-220, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

POSITION WANTED

SALESMAN—AGGRESSIVE
Desires to represent aggressive company in Los Angeles or southern California. 15 years' selling to chains, jobbers, markets, institutions. Commission or salary. Would consider frozen food line, fish, etc. Age 43. Will send complete resume plus snapshot on request. Will guarantee good results. W-221, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PACKINGHOUSE BEEF MAN: 23 years' experience. Government meat grader, manager of cattle breaking department, tagging and grading of carcass beef for large packer. W-205, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANT SUPERINTENDENT: 24 years' practical experience in all production departments in pork and beef operation. W-222, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

HELP WANTED

RESIDENT SALESMAN: To handle top equipment line in New York, New Jersey, Pennsylvania and neighboring areas. Packinghouse experience essential. Salary commensurate with background and ability. Reply to Box W-56, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MEAT COST ACCOUNTANT: And time study engineer for leading portion cut manufacturer. Hard work, long hours. Profit sharing, bright future. Call James T. Smith, c/o Ottman & Co., Inc., 2 Ninth Ave., New York 14, N. Y. Telephone WAtkins 9-0111.

SEASONING SALESMAN: Southeast. We have an excellent opening for qualified representative to cover the states of Florida, North and South Carolina and Georgia. The representative need not have sales experience provided he has a knowledge of sausage and meat processing operations. Experience of course is more preferred, but we will train the right party. We are one of the top Seasoning Houses in the country and have excellent remuneration and security status to offer. All replies held in strictest confidence. Write Box W-225, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

EXECUTIVE SALES MANAGER: Seasoning house with qualified integrity offers an exceptional permanent home with unlimited future possibilities. Gentleman must be no more than 35 to 40 years of age. Sales experience of seasonings not essential although knowledge of the meat processing industry is. If you think you have the ability and qualifications outlined, write to us, giving a resume of your background. Not interested in your religion or educational background—can you command the respect of a well coordinated sales force? Write to Box W-226, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PACKINGHOUSE PERSONNEL, INDUSTRIAL RELATIONS MAN
Experienced in handling plant personnel work. Exceptional opportunity. Many benefits. Southern Ohio packer. W-173, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

GENERAL SALES MANAGER
Excellent opening for experienced sales executive with prominent southeastern independent packer. Give full details. W-228, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

EXPERIENCED SALESMAN: To handle equipment and supplies. Many exclusive items. Commission basis. W-174, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

HELP WANTED

SAUSAGE FOREMAN
Large eastern sausage manufacturer desires the services of an A-1 sausage maker. Must be able to supervise the complete line of operations. Good working conditions, top wages. All replies held in strict confidence. Our employees know of this ad. Send complete resume to Box W-223, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

QUALITY CONTROL MAN: We are looking for a man who knows his business in quality control for smoked meat, sausage, etc. Please state qualifications, experience etc. to Box W-224, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

ENGINEER WANTED: With experience in refrigeration and maintenance. Give age and references. W-240, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MISCELLANEOUS

WE WILL

CUSTOM SLAUGHTER CATTLE

WILL GIVE THE DROP OR KEEP IT. ANY NUMBER OF HEAD. LONG TERM CONTRACT DESIRED. FEDERALLY INSPECTED PLANT IN THE MIDDLE WEST.

W-175, THE NATIONAL PROVISIONER
15 W. HURON ST. CHICAGO 10, ILL.

BROKER or DISTRIBUTORS WANTED

CORNED BEEF—Selling presently in STATE OF VIRGINIA

For WESTERN PACKER of finest quality pickled briskets, tongues & rounds. Whole & consumer sizes. Choice & commercial. W-242, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

WEST COAST BROKERAGE: Specializing in meat, delicatessen items. Well established in super market chain stores, desires additional preestablished pre-packaged line. W-241, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

WORKING CAPITAL AVAILABLE: No strings attached. For use in a federally inspected plant shipping carloads of dressed hog carcasses & beef carcasses. Write to Box W-244, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

BECAUSE: Of poor health, are forced to sell or lease well-established meat processing and freezing plant located between Albany and New York City. Write to Box FS-230, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.



WESTERN BUYERS

LIVESTOCK BUYERS

Phone: Cypress 4-2411

ALGONA, IOWA

WE BUY HOGS IN THE HEART OF THE CORN BELT
10 OFFICES TO SERVE YOU

HOG BUYERS EXCLUSIVELY

Geo. Hess
Murray H. Watkins

W. E. (Wally) Farrow
Earl Martin

HESS, WATKINS, FARROW & COMPANY

Indianapolis Stock Yards • Indianapolis 21, Ind.

Telephone: MEIrose 7-5481

HAM
BACON

SINCE 1878

LARD
SAUSAGE

Partridge

© THE H. H. MEYER PACKING CO. • CINCINNATI 14, OHIO



MAKE PURCHASING EASIER
USE THE "YELLOW PAGES" OF
THE MEAT INDUSTRY—

the classified volume for all your plant needs

The Purchasing GUIDE for the Meat Industry

A NATIONAL PROVISIONER PUBLICATION

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